

THE

Birds of Sussex.

WILLIAM BORRER.





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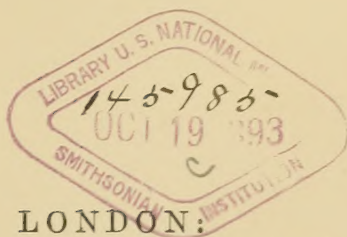
THE

BIRDS OF SUSSEX.

BY

WILLIAM BORRER, M.A., F.L.S.,

MEMBER OF THE BRITISH ORNITHOLOGISTS' UNION.

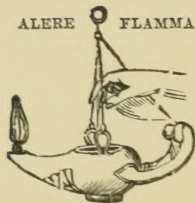


LONDON:

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1891.

ALERE FLAMMAM.



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RED LION COURT, FLEET STREET.

TO THE REVERED MEMORY OF

My Father,

IN WHOSE BOTANICAL RAMBLES I WAS SO OFTEN ASSOCIATED,

AND FROM WHOM I INHERITED THAT LOVE OF NATURE

WHICH HAS BEEN AN EVER-SPRINGING

SOURCE OF ENJOYMENT THROUGHOUT A LONG LIFE,

I DEDICATE THIS VOLUME.

PREFACE.

IT is now nearly a hundred years since Markwick, the friend and correspondent of Gilbert White, read before the Linnean Society, on May 5th, 1795, his 'Catalogue of Birds found in the county of Sussex,' numbering 168 species, including those which are domesticated. About the year 1800, Mr. Woolgar, of Lewes, made a list of birds observed by him in that neighbourhood, which may be found in Horsfield's 'History of Lewes.' In 1849, Mr. Knox published the first edition, and in 1855 the third, of his 'Ornithological Rambles in Sussex,' quoted in this work as "O. R." Since that time, as far as I am aware, no attempt has been made to give a comprehensive account of its avifauna; there are, however, several local Societies,—as those of Brighton, Chichester, Eastbourne, Hastings, and Lewes,—which, from time to time, publish their 'Transactions,' and doubtless do good work in their respective districts. There is also a Museum at Chichester, and one at Brighton, as well as the splendidly mounted collection of the late Mr. Booth, recently made over to that town. There have been, and there still are, many accurate observers who contribute accounts of interesting occurrences in the county to the pages of 'The Zoologist,' especially Mr. Dutton, Mr. Jeffery, Mr. Monk, and Mr. Wilson, who for many years have been its correspondents.

Having been, through a long life, resident in the county, and from my earliest years taken the greatest interest in Ornithology, and being assured by friends, for whose judgment I have the highest respect, that a further contribution, enumerating the birds of Sussex up to the present time, would be desirable, I have employed some leisure hours in recording, partly from my own notes, and partly from those kindly placed at my disposal by friends and correspondents of many years, such facts as I deemed might be of interest in illustrating the nature and habits of our native birds.

These I have supplemented by information from various ancient and modern sources, to which I have, in every case, given references, and have brought up the number of the birds of the county to 297, following the arrangement and nomenclature of the 4th edition of 'Yarrell's British Birds.' In conclusion, I beg to offer my most cordial acknowledgments to those who have so kindly assisted me, and chiefly to Professor Newton, to whom I am greatly indebted not only for looking over my manuscript, but also for many invaluable suggestions, and without whose kindly encouragement I should not, at my advanced age, have undertaken the work. To J. E. Harting, Esq., F.L.S., who has favoured me with several original and useful notes; to the Rev. R. N. Dennis, formerly Rector of East Blatchington, a friend and correspondent of many years; to Mr. Ellman, formerly of Glynde, Mr. Jeffery, of Ratham, Chichester, and T. Parkin, Esq., of Hastings, who most kindly placed at my disposal their private notes, extending over a long period, and quoted as p. n.; and to many other ladies and gentlemen, some personally unknown to me, who have most

courteously replied to my enquiries, or volunteered information, in many cases taking considerable trouble on my behalf, I tender my most sincere thanks.

I would also desire to record my obligations to the several Taxidermists of our towns, who have most obligingly furnished me with notices and particulars of rare species, which have, from time to time, come into their hands, especially Messrs. Pratt, of Queen's Road, Brighton, whom I have known for many years, and have always found most intelligent and reliable; Mr. Bristow, the well-known naturalist of St. Leonard's-on-Sea; Mr. Bates, of Eastbourne; Mr. Brazenor, of Western Road, Brighton; Mr. Ellis, of Arundel; Mr. May, of East Grinstead; and Mr. Potter, now of Carlisle.

The few plates with which this work is embellished are by the pencil of Mr. J. G. Keulemans, the Gyr Falcon and the Honey Buzzard being portraits of specimens in my own collection.

W. BORRER,
COWFOLD, SUSSEX.

November, 1890.

INTRODUCTION.



ON putting forth this little account of the ‘Birds of Sussex,’ it may perhaps be well to give a general idea of the natural features of the county, which measures about seventy-six miles in length by some twenty-seven in breadth. It is bounded on the north by Surrey and Kent; on the south by the English Channel, the coast line being about eighty-six miles in extent; on the east by Kent, and on the west by Hants. The geological formation of Sussex may, speaking generally, be divided into three principal portions throughout its whole length: namely that of the Chalk, comprising the South and Western Downs; the Weald, consisting chiefly of what is known as Wealden Clay; and the Sand, which forms a narrow band between the two. Besides these there are comparatively small deposits of Bracklesham and London clays, of which the most considerable extends about ten miles south from Chichester to Selsey Bill, and about twenty east and west from the boundaries of Hants to within a few miles of Worthing, being, however, now and then broken into by the Chalk. Again, about the courses of the rivers, there are narrow alluvial deposits, becoming wider towards their mouths, and at the eastern end of the county are two large beds of alluvium, blown sand, and shingle, forming the Levels of Pevensey, Rye, and Winchelsea. The ancient forest of Anderida is described by the

Venerable Bede, about the year 731, as "thick and inaccessible," and as a place of shelter for large herds of deer and swine, as well as wolves; and we learn from the Saxon Chronicle that in A.D. 893 it extended from east to west one hundred and twenty miles, and from north to south from eighty to ninety miles, making it nearly co-extensive with the Weald in Sussex, Kent, and Surrey. It is now so greatly curtailed by clearing and by cultivation that little remains but the forests of St. Leonard, Tilgate, and Ashdown. From the time of the Romans to that of Charles II., large portions of these forests were greatly reduced by the practice of felling trees for charcoal, to be used in the extensive manufacture of iron; but in his reign, on account of the great destruction of the oak-timber consumed in smelting it, the portion now known as St. Leonard's was disforested, and made a deer-park, thus, of course, doing more harm than good, as every young oak was browsed down by the deer. There is a small portion of the ancient woodland called Charlton Forest, situated on the north slope of the Western Downs, the only part of them which still has native timber. The whole of the county, however, with the exception of the Downs and the levels of the rivers, is still very well wooded, as may be seen by any one looking down upon it from their summits. This is, in a great measure, caused by the practice of the original reclaimers, of leaving a strip of wood, in this county called a *Shaw*, of several yards in width, around each enclosure for the preservation of timber, the oak of Sussex being considered the best in existence for the use of the Navy; and it is still the prevailing tree throughout the county, though more especially on the clay. There are two distinct species, the *Quercus pedunculata*, or *robur*, and the *Q. sessiliflora*, of which the former is by far the commoner, and, from its greater durability, very superior as timber to the latter for naval purposes.

The *Q. sessiliflora* is found in various parts of the county, for example near Cowfold and Cuckfield, and in several parts of St. Leonard's Forest, as at Coolhurst and Slaugham, and to the westward at Goodwood. This oak, though undoubtedly indigenous, but not so common in Sussex as in some other counties, is said to have been largely increased by the introduction into some parts of England, several ages ago, of large importations from the Continent, especially from the forests of Germany. It has been said that the numerous complaints of our ships being infected with what is generally called dry-rot were owing to the introduction of this species into our naval dockyards, where the distinction was not even suspected until a very few years since. However this may be when it is used in so confined a situation as the hold of a ship, it has been indisputably proved that the timber of *Quercus sessiliflora* is exceedingly durable in places exposed to a free current of air; for the roofs of many of our oldest buildings, for example, those of Westminster Hall and St. Alban's Abbey, are certainly built of it, though the timbers had been long mistaken for Spanish chestnut, and are still found to be in good condition*. With respect to the belt of sand, which extends from near Petersfield, on the borders of Hants, to Pevensey Level in the east of Sussex, a considerable extent of the western portion of it is occupied by heath. Other parts, however, are capable of the highest cultivation.

Having now given a slight sketch of the interior of the county, I pass to the coast, which, from Brighton to Eastbourne, consists of cliffs rising to various heights from the former town till they attain their greatest elevation, some

* See a paper read by Mr. Wyatt Papworth, at a meeting of the Royal Institute of British Architects, held on June 14, 1853, and observations by the same gentleman at another meeting of that body on May 20th, 1878.

six hundred feet, at Beachy Head, or, as it was formerly spelt, Beauchef Head, and indeed it well deserves this appellation. Here the cliffs terminate abruptly, and Pevensy Level continues till beyond Hastings, the sandy cliffs there being low and gradually falling to the Levels of Rye and Winchelsea. Westward of Brighton the coast is level and somewhat flat, and so continues to the border of Hants.

Of the Rivers of Sussex, none of which are of any size, beginning from the east, we have the Rother, which rises in the parish of Rotherfield, and, passing Mayfield, receives a small tributary from Wadhurst, and flowing by Etchingham and Salchurst, enters Kent, and returning to Sussex, south of the Isle of Oxney, expands into an estuary, and falls into the sea about two miles south-east of the town of Rye. The Cuckmere, rising not far from Heathfield, forms near its mouth a narrow tract of level country, which seems particularly attractive to Wildfowl in the winter, the sea there being somewhat sheltered by cliffs, enabling them to spend their days upon the water in comparative quietude, the grassy marshes affording convenient feeding-places by night. The Ouse rises partly near Slaugham, on the borders of St. Leonard's Forest, and partly near Worth, and uniting its streams, meanders eastward through a well-wooded and cultivated tract of country, and receiving several inconsiderable affluents, passes through the extensive Levels of Lewes to the sea at Newhaven.

The springs of the Adur (profanely called the Weald Ditch) rise under the Downs, near Clayton, and joining two small streams from Bolney and Cuckfield, near the bridge at Wyndham, it proceeds to Mock Bridge, there receiving another tributary from the Leach Pond in St. Leonard's Forest, and all flow together to Eaton's Farm, in the parish of Henfield, where a branch falls in, which, rising near

Itchingfield, passes through West Grinstead and Shipley to the Henfield Level. There another branch is received, rising from between the Chalk and Greensand under the Devil's Dyke; the united streams then, passing Bramber, fall into the sea at Shoreham.

The Arun, the largest of our rivers, rises near the great pond at Ifield, whence it flows through the mill-pond at Warnham into the parish of Slinfold, and nearly to Loxwood, near which it joins a stream originating under Leith Hill, in Surrey, and passing a little east of Wisborough Green, receives a tributary from Shillinglee Park and another from the Hawkins, Hammer, and Birchin ponds, near Horsham. It then receives the Western Rother (which rises in Black Down) about halfway between Stopham and Pulborough, and flowing through the wide meadows, formerly marshes, known as Amberley Wildbrook, and past the town of Arundel, reaches the sea at Littlehampton.

The Lavant, which, often dry for months, is remarkable for being fullest of water in the hottest weather, rises from under the Chalk in Charlton Forest, and flows by Chichester into the estuary known as Chichester Harbour, near the village of Wittering.

These rivers are all of them subject to heavy floods, from the narrowness of their mouths, and the enormous drainage of the country, proving, of course, very attractive to many species of birds. Pagham Harbour, which was formerly a perfect paradise for the ornithologist, has now, unfortunately for him, entirely disappeared, the sea having been a few years since banked out, and the mud-lands reclaimed and brought under cultivation. The estuary forming Chichester Harbour extends from Fishbourne to the sea, and is some seven miles in length; soon after being joined by Bosham Creek, it expands into a large sheet of water nearly three miles in width, to the border of the county at Emsworth

Channel, and contains the Isle known as Thorney Island. It measures, from Prinsted to the sea, about five miles, the whole of this being, at low water, on both sides of its central channel, a vast extent of muddy banks and flats, very attractive to Waders and Seafowl in the summer, and in the winter the resort of various Ducks and other birds.

The many changes of the last half-century have greatly interfered with ornithology in this county, as in others. The whole of Sussex is now intersected with railways, not only inland but along the coast, nearly the whole of what may be called the maritime district being traversed by a line of rails extending from Brighton to the extreme western limit of the county, the whistle of the steam-engine taking the place of that of the Wildfowl and the Wader. The estuaries, formerly abounding in these species, are now far more disturbed by traffic than they used to be; and much of the marsh-land has been brought under cultivation. The last of the grand morasses of the western division, the Amberley Wildbrook, is converted into so-called smiling meadows, re-echoing with the lowing of cattle instead of the hollow boom of the Bittern and the croak of the Heron. The Downs too, once the peaceful haunt of the Bustard and the Lapwing, or disturbed only by the shepherd and his flock, are now to a great extent broken up by cultivation, and harassed by the rattle of the steam-plough. The cliffs have in many places been scarped down, or shattered by the engineer, thus destroying the favourite resorts of many wild birds. The inland aspect of the county, too, is much changed from what it was in former times. Where are the splendid stretches of heather? the sedgy bottoms? and where are the Black Game?

The whole tribe, too, of Hawks and Owls, though to a certain extent destructive, were useful to the Game preserver and the farmer,—to the one by destroying the weakly

individuals, and thus leaving only the most healthy birds for the stock of game; to the other by keeping down the multitude of rats, mice, and other vermin which do the farm more injury than all the birds of prey have ever done, and which have most destructively increased throughout the county in general, a state of things which can never be remedied till every country gentleman gives strict orders to his keepers to carefully preserve all birds of prey, and *sees that his instructions are carried out*. At the present time these birds have either entirely ceased to breed in the county, or have become so diminished in numbers, that with the exception of the really mischievous Sparrow-hawk and the harmless Kestrel, a bird of prey is rarely to be met with. To these causes may be added the wholesale destruction of small birds by the bird-catchers, the increased population, and the constant improvement in firearms of all kinds.

On the other hand, however, we have derived a certain degree of benefit by the late Acts of Parliament for the preservation of many species during the breeding-season, and from the increasing attention given to Natural History in general.

Notwithstanding all the drawbacks I have mentioned, the county still presents an interesting field for future investigation, and in the woodland districts there are still abundance of songsters and other of the migratory birds, though on the clay-land I have observed that there are fewer individuals, though perhaps not fewer species, than on the sandy districts, but a very few miles off; a circumstance which I think may perhaps be attributed to the comparative lightness of the soil there affording greater facilities for dusting, which all birds at times require, and which the weaker species find some difficulty in obtaining on the clay, as when the weather has been wet it is a long time before

the soil will pulverize, and when very dry it is too hard for them to be able to scratch it up.

Although I am quite sensible of many defects in my work, and have made no attempt at science, I still hope that it may be found of some interest to the general reader as well as to lovers of Ornithology, and may tend to make known the present state of the Bird-life of the county; and as will, I think, be seen, no pains have been spared in verifying the occurrence of the rarer examples. It only remains to me to mention my reasons for omitting a few which have been accepted as Sussex birds; and first, respecting the Golden Eagle. Though Markwick mentions it as having occurred at Bexhill, he does so on very insufficient evidence, and there can be little doubt that he was mistaken, for the following reasons: he makes no allusion whatever to the *White-tailed*, *Sea*, or *Cinereous Eagle*, which has occurred several times in that very district, and in his time the different species of Eagles were not properly distinguished. The Golden Eagle, too, has never since been seen in the county; thus it may be fairly concluded that the bird he records was nothing more than the White-tailed Eagle. The Canada Goose, as its name implies, is a Nearctic species; I have not included it because, though specimens have been frequently met with in Sussex, there is little doubt that all have been escaped birds bred on, or in the neighbourhood of, the numerous pieces of water on which they have been for many years kept in a semi-domesticated state, and whence young birds, which could not be captured and pinioned, naturally, especially in severe weather, disperse over the country in search of food. To the Egyptian Goose, an African species, the foregoing remarks will equally apply. The Hooded Merganser, as I have explained in my account of the Goosander, has been erroneously mentioned as a Sussex bird.

Concerning the Owls formerly in the Keep of Arundel Castle, which I believe were generally supposed to be Eagle Owls, and were mentioned as such by Mr. Knox in O. R. p. 91, as they were for many years a great attraction to visitors, a few words may be expected, though they have no claim to be called Sussex birds. I may say that when I saw them many years ago I had no doubt that they were the Virginian species, in which opinion I am confirmed by the following notice in 'The Beauties of England and Wales,' vol xiv. p. 82, by F. Shoberl, where, speaking of the Keep of Arundel Castle, he says: "The Owls which are kept here were a present to the Duke from North America." This was published in 1813. Mr. J. H. Gurney kindly made enquiries for me of the present Duke, who most courteously gave all the information in his power, stating that he believed it to be the fact that the Owls were introduced into the Keep by Charles, the 11th Duke, who died in 1815, and that some were still remaining when he himself came to the title in 1860, but that during his minority they gradually disappeared from the Castle, though two were remaining in a garden in the town up to the end of 1869. Mr. Mostyn, the Duke's agent, kindly forwarded me a letter from an old man, for many years the custodian of the Owls, who states that they occasionally bred in the Keep, producing but one egg in the season, and hatching it; but in 1859 one bird laid three eggs, which produced three fine young, which grew to maturity. One of the Owls, which had long been known as "*Lord Thurlow*," at last laid an egg, which was the subject of considerable amusement. Mr. Gurney had a cutting from the 'West Sussex Gazette' of 1859, stating that one of the Arundel Owls, believed to be the original "*Lord Thurlow*," had just died, supposed to be about a hundred years old.

Three were at one time several Decoys in the county :

at Firle, the only one now worked, the captures at which are very small ; at Tangmere, Angmering, Tortington, Glynde, and Peasmarsh, all of which have ceased to be worked, on account of the increased drainage and the disturbance caused by the railways ; but all my attempts to obtain any of the Decoy books, or indeed any information as to the number or species formerly captured, or anything whatever beyond what has been stated by Sir Ralph Payne Gallwey, in his lately published interesting and exhaustive work, 'The Book of Duck Decoys,' have failed, except in the case of that at Ratton, the proprietor of which, Freeman Thomas, Esq., most courteously forwarded me a book of entries dating from 1793 to 1827, and from 1852 to 1861. The only species mentioned are the Wild Duck, Teal and Wigeon, Winders, which name is applied to the Wigeon, though I never before heard of the term in Sussex, and Divers, which may allude to the Scaup Duck, which is generally known by this name. Of these, the numbers caught from 1793 to 1827 were, of Ducks 2903, of Teal 446, of Wigeon only 2. There is no further entry till 1852, from which date to 1861 there appear to have been taken, of Ducks 8226, of Teal 5075, of Wigeon 175. Besides these there are recorded 827 head of Ducks and Teal mingled together, as well as 25 Winders and 7 Divers. My thanks are also due to E. J. Mostyn, Esq., the agent to the Duke of Norfolk, who most kindly forwarded to me a copy of the information supplied to Sir Ralph Payne Gallwey.

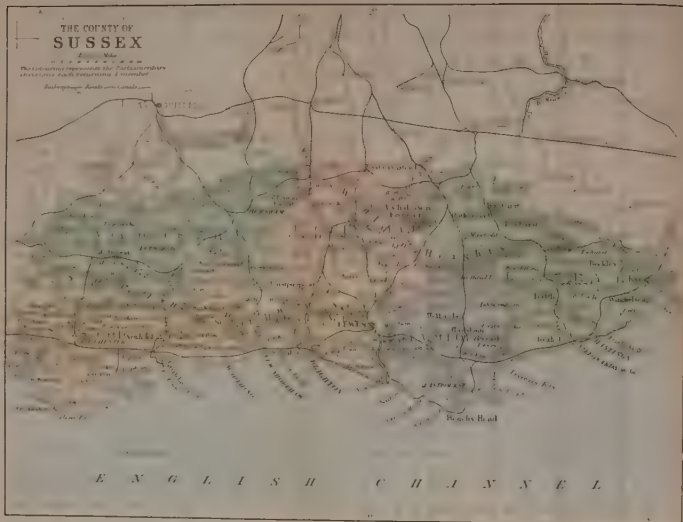
In conclusion I will only add, that as I have found it a life-long pleasure to investigate the works of the Creator, so wonderfully and beautifully displayed in the Natural History of the "Fowls of the air," so I hope that the results of my studies, thus presented in this volume, may help those who come after me to enjoy the same pleasure.

THE COUNTY OF SUSSEX

Eight Miles

The following represents the Parliamentary
divisions each returning a member

Railways Roads and Canals



THE
BIRDS OF SUSSEX.

FALCONIDÆ.

WHITE-TAILED EAGLE.

Haliaeetus albicilla.

AN Eagle of this species was shot at Shoreham by the landlord of the Dolphin Hotel in that place, where I saw it in 1841. It was in immature plumage, and had been killed some years before. In one of my own notes, made at the time, I find that a specimen of this Eagle was killed in 1839 near Newhaven. The white was just beginning to show on the outer feathers at the base of the tail. This bird passed into the hands of Mr. H. Morgan, then of Lugwardine, Herefordshire. Having seen in the 'Sussex Express' newspaper of December 30, 1844, a notice of an Eagle taken near Northheath, I wrote to the late Mr. Knox, who replied:—"The Eagle to which you refer is an immature Sea-Eagle trapped in one of the large woods on the Cowdray estate." In the early spring I have twice seen an Eagle pass over—one at Portslade, the other at Henfield,—both going

eastward, but have not the dates. In a letter from Mr. R. N. Dennis, dated February 22nd, 1855, he informs me that an Eagle was seen by one of the men of the Coastguard, near Seaford. The bird had established himself on a high spit of beach, which became an island at high tide, to which he carried his prey in order to dine in security, and from whence he kept a vigilant look-out on all around. He was quite unapproachable, but the Preventive men could watch all his proceedings with the glass with the greatest ease, as he was in full view of them from their station-house.

On the 26th of December, 1864, as I was in a vehicle about a mile and a half eastward of Henfield, my attention was attracted to a large brown mass, near the top of an oak tree. As I could not satisfy myself that it was a bird at all, I asked the driver what he thought of it. He, not hearing what I said, immediately stopped the carriage, by which means the brown mass, being only about a hundred yards off, was startled, and, on its rising up, we could distinctly see that it was an Eagle, and that the tail was entirely white. It then glided away towards a large wood, and we last saw it flying eastward; but I was informed that it was seen again the next day, not far from the spot where we first observed it. This bird was, of course, adult; and as I learn, on the best authority, that in no other instance, of late years, has an adult Sea-Eagle been reported in England in a wild state, this circumstance rather leads to the suggestion that the one we saw might have escaped from confinement. In Mr. Knox's *O. R.* (pp. 40, 43) several occurrences of the Sea-Eagle are mentioned, viz.:—the one before referred to at the Dolphin Hotel at Shoreham; another shot in 1841 at Rottingdean, where it had been observed for about a month; a third, killed at Windmill Hill, in the parish of Wartling, in January 1844; as well as a fourth on Pevensy Level about 1845. Beside these, one is mentioned as having been

trapped in one of the large woods on the Cowdray estate, which must be distinct from that recorded as taken on the same estate just when the first edition of that work was passing through the press, namely in 1849. The 'Zoologist' records :—"A magnificent specimen of this Eagle was shot in December 1859, feeding on a dead turtle, at Birling gap. It had been seen in the neighbourhood for several days" (p. 6889). A female Eagle, in fine plumage, taken while feeding on a gull, near Shoreham; she had the tail about two thirds white, and was preserved by Mr. Pratt, of Brighton (p. 8875). And another immature specimen, shot by the head keeper of Lord Gage, in the Compton Wood, Firle Park, preserved by Mr. Swaysland, of Brighton (p. 1512). An immature bird was obtained at Shoreham harbour, in February 1881, where it had been seen for a few days feeding on the rejectamenta on the beach, picking up its food near the water, and retiring with it to the *full of the beach*, where it was very difficult to approach. As this term *full of the beach* may very probably be an expression which, except to an inhabitant of the coast of Sussex, might not be intelligible, I will here explain that it is applied by the sailors, fishermen, coastguard, and all whose vocations lead them to pass a large portion of their lives on the beach, to that part of it which has been cast up to a higher point than the rest by some unusually high tide, and remains the highest point, till again removed by some remarkable storm, or some still more extraordinary tide.

OSPREY.

Pandion haliaetus.

ON June 14th, 1843, I saw one of these birds flying near some large ponds at Bolney, and I heard, from Mr. Marshall

of that place, that it had been for some days observed there, fishing with great success. After catching a fish, it retired to some neighbouring trees, and, when it left the pond altogether, it always took a north-westerly direction, sometimes carrying a fish with it. It, at first, visited the ponds daily, and was tolerably approachable, but, after having been twice ineffectually shot at, it came much less frequently, until its last appearance on July 2nd. About the same time I saw an Osprey capture, and fly away with, a good-sized tench, from a pond a few hundred yards from my house at Cowfold. I say tench, as there is no other kind of fish in the pond. As Cowfold is only some three miles from Bolney, this was probably the same bird.

On the 1st of September, 1843, two Ospreys were seen fishing and settling on some trees on the north side of the Upper Mill pond at Bolney, but could not be approached within shot. These birds were observed about the ponds and neighbouring brooks during the whole of October.

On September the 16th, 1866, I saw an Osprey in the second year's plumage, which had been shot at Bishopstone, and was being preserved by Mr. Pratt, of Brighton; it was too much injured by shot for the sex to be distinguished. About the same time and place another, but this was neglected and spoiled.

In O. R. (p. 45) the Bolney birds are mentioned from notes given by me to the author, who also records a female killed at Lye Pond, near Cuckfield, a specimen shot near Amberley in 1846, and another at Siddlesham. The bird mentioned in O. R. (p. 48), as knocked down by a shepherd boy with his crook, came into my possession, and was given by me to Mr. H. Morgan, of Lugwardine in Herefordshire. This was a fully adult bird.

The Osprey has been shot on the Adur at Shoreham, and on the same river at Beeding, and has occurred near

Chichester and Brighton, on Pevensey Level, and at Rye Harbour (O. R. p. 46).

Mr. Dennis informed me, by letter, that an Osprey had been shot on the Castle Hill, Newhaven, on the 23rd of August, 1862, and observed that he had not heard of one in that neighbourhood for eighteen years. In November 1848 an Osprey was killed at Udimore (Zoologist, p. 2346), and in September 1867 one was shot at West Wittering, and about the same time another specimen was obtained at Littlehampton (Zoologist, p. 1034).

The Osprey being, in England, strictly migratory, not unfrequently occurs in an adult state, whereas with the Eagle exactly the contrary is the case.

Since writing the above, I have received notes from Mr. Jeffery, in which he states that an Osprey was killed at Stanstead, near Chichester, on the 16th of October, 1863.

GYRFALCON.

Falco gyrfalco.

ONLY one specimen of this bird appears to have occurred in Sussex, and it is now in my own collection. I obtained it from Mr. Ellman, who informed me that it had been shot at Mayfield in January 1845, during severe weather; it was in the act of devouring a pigeon on the top of a wheat-stack. Mr. Ellman had had it some years when I saw it, and he considered it to be a light-coloured specimen of *F. peregrinus*; but I convinced him that it was one of the Gyrfalcons, and he has recorded it as such in the 'Zoologist' for 1851 (p. 3233), stating it to be an "immature" bird.

In Yarrell's 'British Birds,' vol. i. (p. 49), the same bird is mentioned, from my information, as *F. islandicus*, which

I then considered it to be; and it is also so recorded in Mr. Harting's 'Handbook of British Birds,' on my authority.

In order to rectify my unfortunate error, I quote the following from 'Zoologist' for 1884 (p. 271):—"This specimen subsequently passed into the collection of Mr. Borrer, of Cowfold, where I had recently the pleasure of examining it, and of identifying it as a genuine example of *Hierofalco gyrfalco*, not 'immature' as stated by Mr. Ellman, but in fully adult plumage and in excellent preservation. The very great rarity of British specimens of this Falcon induces me to record my opinion that this example is referable to *H. gyrfalco*, and not, as catalogued in Mr. Harting's 'Handbook of British Birds,' to *H. islandicus*.—J. H. GURNEY, *Northrepps, Norwich*."

I have therefore no hesitation in designating this specimen as above.

This species has not hitherto been recorded as British. In Yarrell, vol. i. p. 47, is this observation:—"It is quite possible that examples of the true Gyr Falcon have occurred in these islands, and have been mistaken for the commoner form."

GREENLAND FALCON.

Falco candicans.

LIKE the last-mentioned species, I can find but one example of this Falcon occurring in Sussex.

It was a female in good plumage, shot on Sept. 26th, 1882, on the top of Bullock's Hill, near Balsdean, in the Lewes neighbourhood; and being taken into Lewes market, was bought by Mr. Monk, who sent it to Brighton to be preserved

by Mr. Swaysland. It had been seen for some time on the Downs. While it was in his possession it was seen by Mr. Gurney, who thus records his opinion:—"I found it to be a fine adult *Hierofalco candicans* (Gmel.), of a medium character as regards the extent of its dark markings, but I think inclining to the light rather than to the darker phase of this very variable species. This bird, when shot, had just completed its moult, except as to the quill-feathers of the wings and tail: in the latter only two new feathers had yet appeared, both lateral and one on either side." ('Zoologist,' 1883, p. 80.)

PEREGRINE FALCON.

Falco peregrinus.

THIS bird is resident in the county. A note of my own states that an adult female was caught in a trap near Lewes, April 18th, 1841.

In July of the same year I saw, at Brighton, two examples alive, which had been taken from the nest at Beachy Head on the previous 23rd of May. The male was very tame, but the female was very fierce when interfered with. She made her escape while I was looking at her, and flew over several houses, but allowed herself to be taken again by the man who was accustomed to feed her. Some months afterwards these birds came into my possession, and the male, which had just obtained his full plumage, made his escape, and was shot while sitting on a chimney about half a mile off, and was brought to me, and is now in my own collection. I have next recorded an adult male shot at Seaford, March 2nd, 1842. In September of that year I saw one on the wing near Henfield, which passed me within about 80 yards.

An interesting account of the Peregrine Falcon in Sussex is given in O. R. (p. 106), in which reference is made to its breeding-places in the high cliffs of Beachy Head and Newhaven, and to specimens appearing in the western division of the county, in the neighbourhood of Chichester, Petworth, and Arundel, as well as in localities nearer to their breeding-places, as Lewes, Newhaven, Seaford, Pevensy, and Rye. One is also recorded as having been taken under the eaves of a barn with a sparrow-net, at Saddescombe, near the Devil's Dyke. Mr. Booth, in his 'Rough Notes on British Birds,' writes that the chalky cliffs between Rottingdean and Beachy Head harbour great numbers of Peregrines in autumn and winter. The 'Zoologist' contains several references to the capture of these birds, both young and mature :—

In May 1849 three taken from the nest (p. 2494), a female near Eastbourne in December 1859 (p. 6889), and one killed near Arundel in April 1868 (p. 2059, s. s.). There are also recorded in the volume for 1881 (p. 49) a young male killed near Earnley, in West Sussex ; and in the volume for 1882 (p. 114), a male in fine plumage shot near Hastings in November 1879, and another male shot in Bromham Park, near Guestling, about the same time.

It is very astonishing that, considering the constant persecution by gunners of every description, and the frequent harrying of the nests for both eggs and young, this Falcon has not long since abandoned the locality, instead of which I have been repeatedly assured that on the destruction of one of either sex, its place has very shortly afterwards been taken by a new arrival. This may do very well for a time, so long as supplementary spouses are to be met with ; but it is obvious that, with the constantly decreasing numbers of this fine species around our coasts, the day will come, and indeed is probably not far off, when the stock left will be insufficient to furnish the supply.

HOBBY.

Falco subbuteo.

A SUMMER visitant, making its appearance in April and leaving the country, on migration, in the autumn, a few occasionally remaining rather late. I am not aware of its having been found breeding in Sussex, or of any very young birds having been obtained. It feeds on beetles and dragon-flies, as well as on small birds &c. It is said to be partial to the deserted nest of a Carrion-Crow as a site for rearing its young.

I have but few references respecting this species in my own notes. One was seen on the shore near Worthing, on the 13th of May, 1841, and another, an immature bird, was shot at Poynings on August 15th of the same year. I have also noted that a mature male was shot at Cowfold while attempting to take a young tame Pigeon, which he had struck, close to a farmhouse, on April 25th, 1879. In the autumn, about 1880, a Hobby was picked up in the garden of the vicarage at Cowfold, and was kindly sent to me by the vicar. This, which is a mature male, had apparently been killed by flying against one of the windows of the house. A few years since an adult bird was sent from Pagham to my friend Mr. Harting, while he was on a visit to me at Cowfold.

The late Mr. Knox, in his O. R. (pp. 113 to 115), mentions the courage and address of one of these birds in pursuit of a wounded Partridge, and that of another which he shot near Petworth while chasing a Turtle-Dove; and also notes that there is a specimen of the Hobby in Chichester Museum, which was shot at Halnaker in September 1836, and that he "had observed it near the great beech-woods during the autumn, and, indeed, it is at this season that the Hobby is generally killed."

RED-LEGGED FALCON.

Falco vespertinus.

A VERY rare summer visitant. In Mr. Dresser's 'Birds of Europe,' vol. vi. p. 94, it is stated that one was shot at Rottingdean in 1851, by Mr. Howard Saunders. I wrote to the latter for further particulars, and, in his reply, dated Oct. 6, 1889, he informed me that he, being at school at the late Dr. Smith's at Rottingdean, and one of the senior boys there, was allowed to take the Doctor's walking-stick gun and wander about in his kitchen-garden to shoot small birds. This garden was fringed with sycamores up to the height at which the wind caught them, and suddenly the *Falco vespertinus* alighted on a branch, and he shot it. It was a female or young male, and was mounted in Brighton for Dr. Smith, who had a dozen or so of stuffed birds. Dr. Smith died about 1864, and Mr. Howard Saunders does not know what has become of them.

The late Mr. Rowley, in his 'Ornithological Miscellany,' vol. i. pt. 2, has the following:—"The Red-legged Falcon paid the Brighton downs a visit on May 20, 1873, when an adult male arrived, of which I sent an account to the 'Field,' May 24. I received two sorts of beetle on which it had been feeding. This bird two days after death became very high, as is usually the case with those which live on beetles and some other insects. This pretty little Falcon breeds in flocks." I saw this at Mr. Swaysland's, in the flesh.

In the 4th ed. of Yarrell's 'British Birds' it is merely mentioned that the bird has occurred in Sussex.

MERLIN.

Falco aesalon.

On Nov. 3rd, 1842, a female was shot at Bosham. On the 19th of Feb., 1844, I saw, near Cowfold, a Merlin rise from the side of a hedge, mount perpendicularly to some height, and again descend close to the same spot, whence it flew off very rapidly, not more than a foot above the ground, over a ploughed field close to the road. It was so close to me at first that I had a good view of the slate-blue colour of the upper parts, showing it to be an adult male. On Jan. 7th, 1852, an immature female was shot at Henfield, where I saw it at the shop of Peter Ward, gunsmith. I have often seen this bird on the open downs in winter. According to Mr. Knox, it prefers the open country to the weald. It nests on the ground, but I have never heard of its having done so in Sussex.

Mr. Booth states that "on the South Downs these Hawks are not unfrequently captured in the nets of the bird-catchers. At times they dash suddenly down, with an impetuous swoop, and destroy the brace-birds. Occasionally they approach in a more cautious manner. I have noticed them to settle first at some short distance, and then to draw on towards their intended victims. In one instance a very young Falcon alighted on the pull-line, where it remained for several minutes, regardless of half a dozen persons within a distance of twenty yards, its attention being apparently entirely engrossed by the decoys in the net."

In the 'Zoologist' Mr. Ellman writes that a mature female Merlin was shot at Rye Harbour, in February 1849, and that this species appeared, in rather considerable numbers, in the neighbourhood of Lewes early in October in that

year, five specimens falling into the hands of the same person in a very few days. Also that one was brought to him taken alive near Lewes, September 13th, 1850 (pp. 2410, 2698, and 2953).

In the same journal (p. 9465) Mr. Dutton states that a male Merlin, with the blue back, was shot at Abbotswood, near Hailsham, early in January 1865.

This species is entirely a winter visitant, appearing in autumn and departing in spring.

KESTREL.

Falco tinnunculus.

Is resident, as well as partially migratory.

When the Magpie and the Carrion-Crow abounded in the woods, this Hawk might frequently be found to take possession of their deserted nests for its breeding purposes; those birds, however, have now become comparatively scarce, which may in some degree account for the Kestrel being also less commonly met with than it was in former days.

It is very difficult, too, to persuade the farmers and game-keepers that this bird in no way interferes with their interests, and that, as it preys almost entirely on rats, mice, and other small quadrupeds, and on reptiles, it is so far from being an injurious bird, that it is one which ought to be protected for the good it does.

It is stated in the 4th edition of Yarrell's 'British Birds' (vol. i. p. 79) that the remains of frogs, coleopterous insects and their larvæ, and earthworms have been found in the stomach of the Kestrel. Mr. Selby, in his 'Illustrations of British Ornithology' (ed. 1, vol. i. p. 44), mentions this bird as sometimes feeding on cockchafers, both taking and

eating them while on the wing. Mr. Knox states (O. R. p. 54) that ornithologists are aware that the slowworm (*Anguis fragilis*) is constantly devoured by this Falcon, and mentions that a specimen was shot in his neighbourhood in the act of killing a large adder. He also quotes an extremely interesting account of the Kestrel from the late Mr. Waterton's 'Essays on Natural History' (1st series, 3rd ed. p. 261). Though no kinds of bird appear to be its usual food, that it does sometimes betake itself to them is proved by its occasionally pouncing on the call-birds of the birdcatchers. The Kestrel is generally known in Sussex as the "Windhover Hawk," or "Windfanner." It appears never to hunt in concert, and its usual habit is to hover a considerable time over its prey, and to take it by dropping suddenly upon it from a height.

The chalk cliffs in the south of the county seem to be now its principal stronghold, though it has occasionally bred in some of the chalk-pits so numerous on the South Downs. I well remember seeing a pair which appeared to have established themselves on the spire of Chichester Cathedral.

SPARROW-HAWK.

Accipiter nisus.

THOUGH this species may be occasionally met with in all parts of the county, it more especially haunts the wooded and enclosed districts.

There is perhaps a greater disparity in the relative size of the two sexes in this species than in any other of our birds of prey. It is said to construct its own nest, but, like the Kestrel, it is partial to the old ones of the Carrion-Crow or Magpie; it also builds in plantations of fir, especially of

spruce, in thick ivy on old buildings, and occasionally in the sea-cliffs and chalk-pits, of which latter, did I not deem it unadvisable, I could point out several which have been frequented by these birds for many years in succession.

It is one of the boldest of our Hawks, and flies at game as large as Partridges; and I was told by a gamekeeper, not long since, that he was surprised a few days before by seeing one make a dash at an old cock Pheasant sitting on a rail. All keepers look upon it as their most dangerous enemy. Its favourite object of pursuit, however, appears to be the Wood-Pigeon.

I had, in February 1844, a male Sparrow-Hawk which had been caught in a barn, into which it had pursued a small bird, while two men were there thrashing corn.

It has not unfrequently been known to strike at a caged bird at a window, and I have twice heard of its dashing through the glass with the same object. This Hawk, like several others, is occasionally taken in the clap-net.

In my own district, which is not far from St. Leonard's forest, and is generally well-wooded, this bird may be, even now, called more common than the Kestrel, though both are far less abundant than they were in the olden time.

KITE.

Milvus ictinus.

I HAVE only once seen this bird at large in this county, namely, at Eastbourne, on March 22nd, 1881. When walking westward I saw a bird flying towards me in a very leisurely manner, only just above the surf. I was standing on the sea-wall, and when it came opposite to me it rose to about 30 feet above the water, and passed me so closely that I could

distinctly see its eyes and its yellow feet; it then flew off across the bay as if for Hastings.

An old gamekeeper of my grandfather's, who died in 1855, at the age of 73, has often told me that in his younger days the "forky-tailed Kites" were not uncommon in Sussex, and that they gave a great deal of trouble by taking young ducks and chickens from the farm-yards, but I never heard him say anything of their nesting. I probably never asked him. Montagu, in his 'Ornithological Dictionary,' states that a Kite was knocked down with a broom and captured, at a farm near Hastings, while it was attacking young ducks and chickens about the house.

Mr. Knox mentions the Kite as occurring once near Brighton, and again at Sidlesham, between 1839 and 1849 (O. R. 1st edition, p. 184). Mr. Booth writes that while shooting in the neighbourhood of Brighton, in the autumn of 1878, he saw one of these birds passing westward at a considerable elevation.

In Willughby's 'Ornithology' (Book ii. p. 74), printed in 1678, may be found the following trite remarks on the flight of the Kite:—

"Spreading its Wings it so ballances it self in the Air, that it can rest as it were unmovable a long time in the same place; yea, without at all, or but rarely moving its Wings, it glides through the Air from place to place; whence perchance it took its English name *Glead* This sort of Birds (saith Pliny) seems to have taught men the Art of steering a Ship by the turning of their Tails: Nature shewing in the Air what was needful to be done in the Deep. For hence (as Aldrovandus goes on) it is probable that men learned to apply a Rudder; viz., When they saw the Kite, by turning her Tail sometimes this way, sometimes that way, to direct or vary her course, and turn about her body at pleasure; they also attempting somewhat like, added the Helm to the Ship, by

winding and turning whereof to and fro they could direct and impel it whither they pleased, which otherwise would be driven uncertainly and at random by the Winds and Tides."

The nest is generally very bulky and rather flat, and is frequently lined with various kinds of rubbish, such as rags, pieces of newspapers, old stockings, as well as green leaves, hair and wool; and a high tree is usually chosen for its site. It feeds on garbage of every description as well as on any small or wounded animals, and does not object to fish.

Mr. Ellman had in his possession a Kite which was killed some years ago on Mr. Streatfield's property at Uckfield.

In January 1889 one was shot at Shipley, which was preserved by Mr. Pratt, of Queen's Road, Brighton.

COMMON BUZZARD.

Buteo vulgaris.

On referring to my own notes I find the following:—On January 28th, 1841, one, which had been observed about the harbour for some days, was shot on the cliff at Newhaven; it had a great deal of white about the head. This was in very severe weather.

December 16th, 1843, another was shot at Stanmer Park, which seemed not to have been very particular about its diet, there being in its interior several earthworms and a shrew, as also the remains of a Redwing. It was an adult female.

In January 1849 an adult male was shot in Stanmer Park.

On November 16th, 1850, I saw a male and female, which had been lately obtained near Horsham; the former was much decayed, the other was fresh and was preserved. This last was shot in the act of carrying off a young chicken.

An adult male was shot at Cowfold, November 14th, 1860.

While partridge-shooting at West Grinstead, in September 1877, I saw a Buzzard circling about at a great height for several hours, but never saw it alight. Thus far my own notes.

When this species was not uncommon in Sussex, it was, if distinguished at all, called the "Puttock," but the larger hawks indiscriminately went by the name of Kites. Under this last title I used frequently to see the Common Buzzard in my younger days.

Respecting the food of this bird Willughby (Ornithology, Book ii. p. 71) has the following:—

"It feeds not only upon Mice and Moles, but also upon Birds: For out of the stomach of one that we opened we took a small Bird entire, and out of the stomach of another even a *Thrush*. It is a great destroyer of *Conies*: Yet for want of better food it will feed upon Beetles, Earth-worms, and other Insects."

The late Mr. Knox considered it one of our most uncommon birds.

Mr. Ellman mentions in the 'Zoologist' (p. 3029) that he obtained a very fine old female from Laughton, in November 1850, and (p. 3357) two trapped near Brede in January 1852, observing that he did not know of more than twenty specimens having been obtained in the county in the last twenty years. Mr. Wilson says (p. 6604), under date of November 1855, that in the last four years six specimens had been obtained in the vicinity of Worthing (p. 8441). On the 23rd of December, 1862, a fine old female, the plumage a dark chocolate colour, was trapped in the grounds of Battle Abbey; and in the same journal (p. 491) is found the following from Mr. T. Parkin, of Halton, Hastings:—"On September 27, 1881, a Common Buzzard was brought for preservation to Mr. Bristow, of St. Leonards-on-Sea. It had been shot the day before at the Grove, Hollington, not more

than half a mile from the town. Mr. W. B. Young, on whose property it was shot, informed me that another was seen the same day, and, a week or so afterwards, three more."

Professor Newton, calling my attention to Markwick's observation (Trans. Linn. Soc. vol. iv. p. 13), remarks that the birds which pursued the Rooks in Denne Park could hardly have been Moor Buzzards, which do not frequent high trees. They were much more likely to have been Falcons.

ROUGH-LEGGED BUZZARD.

Buteo lagopus.

A BIRD of this species was taken in a trap in Ashburnham Park, January 1837, and preserved for Mr. Watts of Battle. About the end of October 1839, one was shot near Chichester, and sent to me by the late Mr. F. E. Freeland, of that city. In November 1839 two specimens were shot, and two others taken in traps, near Clayton. Two of these I afterwards saw stuffed. On September 16, 1841, a Rough-legged Buzzard was shot by me at Henfield, while in the act of carrying off a partridge, but it was stopped by the second barrel.

In O. R. (p. 185) it is stated that this species is not so rare as the preceding, that a sprinkling of these birds is always found in very hard weather, either near the inlets of the sea south of Chichester, the marshy tracts of meadow land near the mouths of the navigable rivers, on Amberley flats, or on Lewes levels, and that an example was trapped at Bosham in January 1839, which was disturbed in the act of devouring a rabbit which it had just killed. A fragment of its prey being used as a bait, the poacher was secured on the following morning. That author also says that he, during

that severe weather, examined four specimens, all of which were secured in the western part of the county, and that others had been shot about the same time near Shoreham and Pevensy, and that it had also occurred at Falmers. In the 'Zoologist,' a female is mentioned (p. 6604) obtained in October 1858, and a male, in March 1859, both near Worthing. It is also stated (p. 8492) that a fine female was trapped near St. Leonards-on-Sea; and, in the volume for 1879, one is recorded (p. 109) as having been shot at Wittering in November 1876. It is somewhat remarkable that the adult bird has been so seldom obtained in Britain. Stevenson, in his 'Birds of Norfolk' (vol. i. p. 30), the county in which probably more examples have been taken than in any other, states that he only knew of four which were in mature dress, and to that number Professor Newton, in 'Yarrell's British Birds' (vol. p. 118), was only able to add one more; so that it is not too much to say that until Wolley sent the adult bird from Lapland, no British ornithologist knew what its plumage was. Since writing the above, I hear from Mr. Jeffery that a Rough-legged Buzzard was shot at Up Park, in the parish of Harting, in August or September 1863.

HONEY BUZZARD.

Pernis apivorus.

THIS bird is a regular summer visitant, receiving additions in the autumn, and as it sometimes remains very late, it has been suggested that it would probably remain with us during the winter if undisturbed; but as throughout Europe it is as regular a summer visitant as the Swallow, and its food consists for the most part of insects (wasp-grubs especially), I think it could not exist with us when they could not be

had. It does not, however, confine itself entirely to insect food, as the remains of earthworms and slugs, as well as of moles, rats, mice, and frogs, have been found in its stomach. Willughby says that it runs very swiftly, "like a hen." It is perfectly harmless, and it is a great pity that it is not protected, and allowed to breed with us, as we have the authority of Gilbert White that it did at Selborne, and of others that it has bred in the New Forest. According to Montagu, it breeds in high trees, forming its nest of sticks of considerable size, intermixed with small twigs with the leaves on, and the lining is composed of green leaves and wool. It generally lays two eggs. I have in my collection three specimens killed in Sussex:—one, in the summer of 1837, in Ashburnham Park, and in that of 1841, an old female, shot at Newtimber; also a young male, shot in Shave Wood in Albourne, in the act of scratching out a wasp's nest. This bird is in remarkable plumage, greatly resembling that of the Osprey in its second year. Mr. Dennis, writing to me in August 1858, told me that he had seen a Honey Buzzard which was shot in the month of June of that year, by one of Lord Gage's keepers, in the Plashtet, a wood in Firle Park; its stomach contained caterpillars and the remains of mice.

Mr. Knox refers to specimens obtained in the neighbourhood of Arundel, and in St. Leonards Forest, and between Ashdown Forest and the borders of Kent. He considered this bird decidedly less rare than the Common Buzzard.

Mr. Ellman mentions (Zoologist, p. 2411) an immature bird shot at Udimore, in the latter part of 1844, and (p. 8325) two others are recorded as seen together near Eastbourne: one was shot, in an apple tree, at Birling Gap Farm, and the other near Seaford, a few days afterwards, in September 1863. At p. 8875 we read of a bird, which could have been no other than a Honey Buzzard, shot on Halmaker Common,



3

THE HONEY BUZZARD
Pipilo erythrophthalmus

near Goodwood, in November 1864, while enjoying the contents of a wasp's nest; and at p. 191, vol. for 1881, of a dark-plumaged female, caught at Robertsbridge, and of another taken a few days before at Balcombe. This last was a male which had been feeding on wild bees and their larvæ, its throat being full of them. Another was obtained near East Grinstead; when first seen it was apparently digging for a wasp's nest, October 1881. This species varies more in its plumage than any other of our *Falconide*, sometimes being of a uniform dark chocolate, approaching to black. There is also a variety with a pale bluish-grey head, and the breast much spotted, which has been called the "Capped Buzzard." In this plumage it is very much like a large Cuckoo.

Mr. Potter, formerly a bird-stuffer residing at Lewes, informs me that he once took from the stomach of one of these birds a mass of hairy caterpillars of the Egger and Drinker moths, which would have filled a half-pint mug.

MARSH-HARRIER.

Circus æruginosus.

Of this species I have never myself met with a single specimen in Sussex, and it does not appear in my notes. Mr. Knox considered it exceedingly rare. It appears to frequent only wide expanses of open marshy country, and never to be found in those that are wooded or hilly. Mr. Ellman records (*Zoologist*, p. 3112) that on the 20th of February an immature specimen was shot at Haughton, and came into his possession. Mr. Wilson (*Zoologist*, p. 3605), on the occurrence of rare birds near Worthing, merely states "Marsh-Harrier, June 14th, 1854." Mr. Dutton, of Eastbourne (p. 6266), states that Mr. Vidler, of that town, shot a speci-

men of this bird, in very fine plumage, on the 2nd of October, 1858. The crop was very much distended with the remains of a bird, apparently a Moorhen. Mr. Vidler told him that he had often seen the Marsh-Harrier in the marshes, but had never before shot one. In the same journal, 1879 (p. 19), Mr. Jeffery records his having seen a Marsh-Harrier which had been shot at Sidlesham, a few days before, and had been purchased by Mr. Fuller, of Chichester*.

The Marsh-Harrier feeds on any waterfowl or other birds he can manage to capture, as well as on such small quadrupeds as he may meet with, and is also very partial to fish.

HEN-HARRIER.

Circus cyaneus.

I SAW at Henfield a female which had been shot at Wyndham, by Michael Harnes of that place, December 28th, 1850. On the 10th of March, 1854, I examined two specimens which had been shot near Hailsham. They had neither of them attained the most perfect mature male plumage, one of them having a considerable patch of mottled brown feathers on the back of the neck, and the breast in front delicately spotted with rusty red, the rest being pure white. A slight tinge of reddish brown also remained on the points of the scapulars. The other had a very slight portion of the mottled brown remaining on the nape of the neck, the blue-grey of the upper and the pure white of the under parts being particularly clear and beautiful.

* Mr. Jeffery, in his private note-book, which he has kindly lent me, states that a female was killed at Sidlesham on the 23rd of May, 1861, and is in his collection.

In January 1856 I saw a male Hen-Harrier cross the road close before me, as I was driving between Cowfold and Henfield. This was apparently a fully mature bird.

The Hen-Harrier was formerly a regular summer visitor, a few occasionally remaining through the winter, and that it then bred in this county there can be no doubt; but I can find no certain evidence of its having done so of late years.

The female and the young male, up to its second year, are similar in plumage, but so unlike the adult male that many formerly supposed them to be a distinct species. Montagu, however, set the matter at rest, and proved that the bird generally known as the Ringtail is no other than the female or young male of the Hen-Harrier.

Speaking of the boldness and rapacity of birds of prey when pressed by hunger, Markwick, writing to Gilbert White, in his edition of the 'Works in Natural History' of that observant Ornithologist, vol. ii. (pp. 182-183), says as follows:—"When partridge-shooting with a friend, we saw a ring-tail hawk rise out of a pit, with some large bird in its claws; though at a great distance we both fired and obliged it to drop its prey, which proved to be one of the partridges which we were in pursuit of; and lastly, in an evening, I shot at and plainly saw that I had wounded a partridge, but it being late I was obliged to go home without finding it again. Next morning I walked round my land without any gun, but a favourite old spaniel followed my heels. When I came near the field where I wounded the bird the evening before, I heard the partridges call, and seeming to be much disturbed. On my approaching the bar-way, they all rose, some on my right and some on my left hand; and just before and over my head, I perceived (though indistinctly from the extreme velocity of their motion) two birds fly directly against each other, when instantly, to my great astonishment, down dropped a partridge at my feet: the dog im-

mediately seized it, and on examination I found the blood flow very fast from a fresh wound in the head, but there was some dry clotted blood on its wings and side; whence I concluded that a hawk had singled out my wounded bird as the object of his prey, and had struck it down the instant that my approach had obliged the birds to rise on the wing; but the space between the hedges was so small, and the motion of the birds so instantaneous and quick, that I could not distinctly observe the operation."

Mr. Knox (O. R. p. 90) states that a female was taken in a trap baited with a rabbit's scut, at Offham, in March 1842; that in September 1844, a male was shot near Arundel, another in the same year at West Wittering in December, a male and female at Wivelsfield, in June 1847, and that their nest was *probably* in the immediate vicinity, as they were both mature, and had been seen together for some time previously. He considered this bird to be much rarer than Montagu's Harrier.

Mr. Dennis, in a letter to me, dated January 25, 1851, says that he had sent a female Hen-Harrier to Mr. Swaysland, of Brighton, to be preserved, which had been taken near Seaford shortly before.

In the 'Zoologist' occur the following notices:—

S.S. p. 141, by Mr. Jeffery, jun., of one having been shot on the 14th of December, 1865, in a marsh adjoining Pagham Harbour, which contained the remains of several birds, and of which the plumage was of a general rusty brown colour. He also mentions, in p. 2059, a young male shot at Sidlesham, in December 1867.

In page 3112, Mr. Ellman writes:—"An adult female specimen of the Hen-Harrier was captured alive on the Downs, near Alceston, in a singular manner last month . . . A boy was walking over the Downs, when a terrier he had with him saw the bird at a distance and ran after it. After

running in circles round the bird the latter fell on the ground upon its back, and was immediately seized by the boy."

Mr. Wilson records a male in 1853, and a female in 1854, both obtained near Worthing, in the autumn, p. 6605; and Mr. Kent, in p. 8442, that one, in the Ringtail plumage, was trapped in Ashburnham Park on January the 17th, 1863. (See also p. 2343, S.S.)

Mr. Jeffery, in his private note-book, mentions that one of these birds was seen at Ratham, and another at Funtington in December 1872; and that in November 1880 he saw, in the flesh, a male and female which had been shot near Sidlesham, both adult.

MONTAGU'S HARRIER.

Circus cineraceus.

IN September 1863 a very handsome specimen of this bird was given to me by Mr. H. Padwick, of Horsham, who shot it near Itchingfield. Being a very long shot, it was only tipped on the wing, and very little injured. The plumage being of a general chocolate colour on the upper parts, and creamy yellow beneath, I believe it to be a bird of the first year. Its claws were full of the flick of a rabbit.

It is worthy of remark that Markwick, writing of the blue-grey Hawks, of which he says (Linn. Trans. vol. iv. pp. 12-13) he had some years before shot two, evidently had before him both species, without knowing it, or rather that he at first concluded the male Hen-HARRIER and the male MONTAGU'S to be the two sexes of the same species. His bird with the reddish oblong spots must have been a cock MONTAGU'S HARRIER; while the other, having no spots on the breast,

was a Hen-Harrier, for which he could hardly be blamed, his paper having been read seven years before the matter was cleared up by Montagu.

Mr. Knox says that this Harrier is more generally diffused in Sussex than the Hen-Harrier, and this is still the case.

In the 'Zoologist' (pp. 2260-2261) we find the following entry by Mr. Bates, of Eastbourne :—" I had brought to me last Monday, the 20th of June, a most peculiar marked specimen of Montagu's Harrier. It was a male bird, and of a uniform black-blue colour. On dissection I found in its crop six young skylarks, and in its stomach three more, and five skylarks' eggs. Three were broken in two, and one had a small hole in it, evidently made by the Harrier's beak . . . The eggs were in the stomach, not in the crop."

In p. 2953, Mr. Ellman notes that a female was shot near Arundel, while in company with a male, in October, 1850; and at p. 3329 that an immature specimen was taken near Eastbourne, in the autumn. Mr. Dutton also states that a female was trapped on the 15th of April, 1864, in Pevensey Level, which had killed three young hares, and was caught in a trap baited with one of them. In p. 2060 is a notice by Mr. Jeffery of a Montagu's Harrier which he saw at Chichester in August 1869, it having been killed shortly before near Selsey. In November 1867, the late Mr. Rowley had one which had been taken in a clap-net on the Downs. This was a female; a male also got into the net, but escaped; and in August 1870 the same bird-catcher captured another female at the same place where he took the first, also in a net, just outside of Brighton.

Mr. Jeffery, in a letter to me, dated October the 3rd, 1889, informs me that he obtained one from Sidlesham, May 27, 1862. I was told that a boy one day in the summer of 1888 brought an old female Montagu's Harrier and some broken egg-shells to the late Mr. Swaysland, of Brighton, and said that

he saw it on its nest among the furzes on the Downs above Falmer, and that he threw himself upon it with such force that he killed the bird and broke the eggs. I did not hear how many there were. I may here remark that it is a common habit of poachers, at least in Sussex, to catch hares and rabbits by throwing themselves upon them in their seats or forms.

Mr. Booth remarks that about twenty-five years ago he procured eggs, which must have belonged to this species, from an extensive stretch of furze, known in the district as "The Horthy Field." This was near Catsfield, in the east of Sussex. In this parish was Catsfield House, the residence of the celebrated Markwick.

STRIGIDÆ.

TAWNY OWL.

Strix aluco.

IN Sussex this species, which is generally known by the name of the Wood-Owl, though not so abundant as formerly, is still to be found in the large oak woods, and in most of the parks where there are old trees of any size. I can of my own knowledge mention the following in the west:—Cowdray, Petworth, Burton, Knepp, West Grinstead, and Up Park; and in the east Stammer, Fletching, Firle, and Ashburnham. Being lately at a birdstuffer's shop in Horsham, I saw no fewer than seven specimens of all ages, and was told that the bird is by no means scarce in that neighbourhood, which abounds with old elms, full of hollows in their trunks and branches, where they find most suitable

places for their concealment throughout the year and for bringing up their young at the proper season. Though not so common as the Barn-Owl, it may be met with on the whole range of St. Leonards Forest, principally frequenting the ancient beech trees.

In March 1864 a pair of these birds were constantly heard in the evening about the trees in my own grounds at Cowfold; and as I had never heard them before, I suppose they must have been attracted by one which a neighbour had in confinement near his house adjoining my premises. They were very vociferous, and were called and answered by the tame bird, which had been taken in St. Leonards Forest. The note of the Owl in the cage was very different from that of its visitors, and its proprietor told me that he had never heard it utter the same note but on these occasions. This bird was quite an object of interest in the village, and the owner informed me that it was as good as a watchdog to him, as it made a great disturbance if any one was about the premises at night, and that he, being a medical man, had often been thus apprised of some patient requiring his services. The utilization of the Owl might therefore be advantageous to those who object to paying their dog tax; it might also be useful as a warning of a meditated attack by burglars, as was the goose to the defenders of the old Roman capitol. The Tawny Owl is said occasionally to catch and eat fish, and to supply them to its young, but its principal food is rats and mice, and although it no doubt also helps itself pretty liberally to young rabbits and leverets, the good it does far outweighs its depredations among the game. I once found in the hole of a beech tree, in which were three young Owls, two brown rats and three water-rats, and a very small rabbit. Mr. Jeffery states, in his private notes, that this bird has bred every year in a hollow tree near the Downs from 1859 to 1887.

LONG-EARED OWL.

Asio otus.

I CAN say little from my own observation respecting this species. It is dispersed, in moderate numbers, throughout this county, especially in places where there are old Scotch firs, or thick plantations of younger trees of either these or spruce.

I remember once seeing three young birds, nearly ready to fly, sitting in a line, on the flat branch of a spruce, in a small wood at Blackstone, near Henfield. As these could never have flown from one tree to another, I have little doubt that there was a nest in the same tree, but it was surrounded by an impenetrable mass of brambles and blackthorn, and too thick to see through.

Mr. Gould, in his 'Birds of Great Britain,' after speaking of the number of pellets ejected by this Owl, which he had examined, makes this remark:—"But I am bound to mention that never in a single instance have I discovered a trace of any game bird, and I feel assured that the keepers, who wage war against the Long-eared Owl for the protection of their young pheasants or partridges, are not only giving themselves unnecessary trouble, but are also guilty of the folly of exterminating their best friends, for the number of rats destroyed by this species is enormous, and I look upon the rat as the game-preserver's worst enemy."

I have seen specimens from Parham Park, and I was told by a gamekeeper that they had bred there for several years in succession, in the tops of the lofty old Scotch firs. I have seen other examples from various parts of the county, and have in my own collection one shot at Henfield, in July

1842; and another from Stanmer Park, obtained in the same year.

Mr. Jeffery, in his private notes, mentions that on the 4th of March, 1860, he saw ten or twelve of these birds in a yew tree at Kingley Vale, and records in the 'Zoologist,' for 1881 (p. 49), that on the 10th of December, 1880, a great many had been brought to a birdstuffer at Chichester. In Mr. Gordon's 'History of Harting' it is mentioned that the eggs of this species were found in the deserted nest of a crow on West Harting Down (*vide* p. 253).

SHORT-EARED OWL.

Asio accipitrinus.

I HAVE in my collection three specimens, all shot by myself, viz., one on Henfield Common, October 13th, 1839; another at Hough Wood in September 1841; and a third at Rye Farm, Henfield, while flying close to the ground. Together with this bird I also shot a hare in its form (or *seat*, as it is more usually called by Sussex farmers and sportsmen), just beyond it: this was in October 1841. I have often met with this bird in the turnip fields and in the stubbles, which were formerly left in Sussex, sometimes even to rot on the ground, but which now, unfortunately for the partridge-shooters, may be called non-existent, all corn being cut close to the ground from the first. I once, but only once in this county, put up about forty, from a turnip field, though I have several times in Cambridgeshire seen similar numbers together, probably whole flights on their immigration.

In 1841, I saw a Short-eared Owl, shot near Henfield on the 16th of September, by Mr. A. Smith, which contained the remains of two Skylarks and a short-tailed field vole,

all three of which it had no doubt captured on the ground. I think this species is entirely terrestrial, as I have never seen, or heard of, its settling in trees. It nests also on the ground, but I have never known it to breed in Sussex. I have once only found a nest of this species myself, and as it was not in Sussex, I should not have alluded to it had it not been for the marvellous ferocity of its owner. Were it sitting hard I could have excused it, but, as it had only one egg, I considered its assault upon me perfectly unjustifiable. The nest was in a rabbit-burrow, and I saw the bird fly out. I was kneeling down, when it deliberately knocked my cap off; I took the one egg, which is still in my collection; the bird made repeated attacks on me, and though I could easily have killed it with my stick, not wishing to do so, I was by no means sorry when I found myself out of its way. This was in Quy Fen, near Cambridge, in 1838 or thereabouts.

In this county the Short-eared Owl is a regular autumnal immigrant, never being found in the summer; its appearance about the same time as the Woodcock (seldom before the first of October) has given to this bird the name of the "Woodcock Owl."

EAGLE-OWL.

Bubo ignavus.

THE earliest notice of the occurrence of this bird in Sussex appears to be that of Latham, who, writing in 1787, observes (Gen. Syn. of Birds, Supplement, p. 40) that this Owl is "now and then seen with us, one being shot by the gamekeeper of the Rev. Mr. Hare, at Hurstmonceux, in the year 1784;" and from him Montagu, so far as Sussex is concerned, probably got his information when he says in his

‘Ornithological Dictionary’ :—“ It has been shot in Yorkshire, and in Sussex, as well as in Scotland.”

The muscles of the thigh are stronger in this species, in proportion to its size, than those of the same part of any other bird I have ever examined. I can find no further record of the appearance of the Eagle-Owl in Sussex ; and it is not mentioned by Markwick*.

SCOPS-OWL.

Scops giu.

THE only notice I can find of this little Owl having been obtained in Sussex is that given by Mr. Knox, who says (O. R. p. 9495) :—“ Of the occurrence of that rare visitor the Scops-eared Owl, I can record only one instance in Sussex. It was shot some years ago at Shillinglee, the seat of the Earl of Winterton, and was subsequently in the possession of a member of the family.”

Now, Mr. Knox’s own collection is at the present time at Goodwood, and in it there is a specimen of the Scops-Owl ; and in the MS. Catalogue it is thus referred to, in the handwriting of Mr. Knox :—“ This bird is supposed to have been shot near Plaistow, as reported by the late Mr. Kidd (A. D. 1838), but I have no other authority for its being a Sussex specimen.” For this information I am indebted to Mr. F. D. Godman, who very kindly obtained it for me through Lord Walter Gordon Lennox. Now, as Plaistow is very near to Shillinglee, there is a strong probability that this is the specimen to which Mr. Knox refers in his O. R.

* For the Owls in Arundel Castle, see Introduction.

LITTLE OWL.

Carine noctua.

I HAVE an immature specimen in my possession, which I first saw in the flesh at a poulterer's in Brighton Market, in July 1843. He told me that it was shot by a boy at Sheffield Park, Fletching. I went over there and saw the said boy, who told me that he was lying down in an orchard, having been employed to keep birds off the corn, when he saw the Owl in an apple-tree. He had a gun and powder, but no shot. He said the bird kept making faces at him, and he couldn't stand that, and so, having some tin tacks in his pocket, he loaded his gun with them, and shot it. He gave it to his father, who, instead of taking it to his missus to make a pudding, as a Sussex man would be very likely to do, sent it by carrier to Brighton Market.

I have another example which was taken on the evening of March 27th, 1871, by a man who saw it fly into a rabbit's burrow in Holmbush Park, near Horsham. He dug the bird out and sold it to a birdstuffer in the town, who killed and mounted it. The sex was unfortunately not ascertained. I recorded this capture in the 'Zoologist' (p. 5988), and that notice is also mentioned in Yarrell's 'British Birds' (ed. 4, p. 155), but unfortunately I recorded it as *Tengmalm's Owl*, an error which I much regret, and take this opportunity of correcting. Mr. Pratt, of Brighton, showed me on March 16th, 1877, a Little Owl, which is recorded in the 'Zoologist' (p. 228) as obtained at Shoreham, shot in an orchard close to the town. This came into my possession, and also another, caught alive in an outbuilding near Newtimber, in April of the same year.

I was told by Sir Walter Burrell, Bart., that, finding them

troublesome to feed, he had turned out two of these birds a few months previously at Knepp Castle, and as Knepp is only about ten miles from either of the above places, I have a strong suspicion that these were the birds which he had liberated.

BARN OWL.

Aluco flammeus.

THIS is the commonest species, and well known by the name of Screech-Owl. Formerly it was particularly abundant, and bred in the old stone-roofed houses, churches, and barns in this neighbourhood; but, though it is the best friend of the farmer, and does little, if any, harm to game, it is much persecuted, and like the Long- and Short-eared Owls, is sought for for making fire-screens.

It is also destroyed on account of its disturbing the rest of the lodgers who are now occupying our farm-houses in the summer months, and one of the consequences of this destruction is that the vermin of all sorts is increasing in every direction.

Mr. Waterton, and other authors, have stated that this bird feeds on fish, and I was once watching one of them perched on a branch of an oak, overhanging a pond on my own premises, when it suddenly dropped from a height of some eight feet, and carried off a carp in its claws.

The late Mr. Dawson Rowley, Orn. Misc. vol. i. pp. 62-3, has the following:—

“The beautiful variety in my collection, which has been well drawn by Mr. Keulemans, was captured alive in a pigeon-house near Brighton; there were two, but the other escaped. . . . Mr. Henry Stevenson, in his ‘Birds of Norfolk,’ vol. i.

p. 53, gives an instance of a similar specimen killed near Norwich, December 13th, 1864. . . . He adds it is rather rare in all parts of Denmark. . . These Danish birds, as they are called, have, I suspect, come across from the continent. . . . Mr. Hancock states, in his 'Birds of Northumberland' (p. 21), that an example was shot in his district a few years ago." Subsequently (p. 270), in a paper by Mr. R. Bowdler Sharpe, there may be found:—"There are therefore three occurrences of the Danish Barn-Owl in England, all of them having taken place on the eastern and south-eastern coasts. . . . But announcements of Danish Barn-Owls in England must be received with extreme caution, as our own species has a natural dark phase, which scarcely differs from the ordinary bird of the continent of Europe, and I believe that a thorough examination of the Barn-Owls of all countries would show that in every district [here he excepts a few localities afterwards mentioned] both phases are found in equal proportions. I must observe at least, that several examples, killed in England recently, and brought to me as Danish Barn-Owls, have not been so really, but have turned out to be the dark phase of our resident bird."

There is the following footnote (p. 270):—"Another, probably a male, was taken alive, in the same dovecote Feb. 2nd, 1876.—G. D. R."

PASSERES.

LANIIDÆ.

GREAT GREY SHRIKE.

Lanius excubitor.

THIS bird is generally a winter visitant, though it occasionally occurs in spring. It feeds on mice and small birds, large insects, especially humble-bees, frogs, and lizards. It has a curious habit of impaling its food on a sharp thorn in order to tear it to pieces more readily, and it has been suggested that, owing to the weakness of its legs, it cannot otherwise hold the prey with sufficient tenacity; these collections of hung-up food have no doubt originated the name of "Butcher-Bird."

The nest has never been found in Sussex, and the bird is by no means common, but it appears every year in many parts of the county.

In December 1839, a little before Christmas, two were shot near Bramber Castle, one ten days after the other. This latter, being wounded, bit the hand of the man who shot it very severely. Both are in my possession; there appears to be no difference in the plumage of the two, each having the semilunar markings on the breast.

I have a note of one shot near Lancing on November 13th, 1845; and there is another in my collection, killed at Aldrington in October 1846.

Several of these birds were seen about a hedge at Southwick; and one of them was shot on the first day of its appearance, and another the next. I saw them both soon afterwards, about October 1846.

I also knew of one taken in a clap-net, in a brickfield near Horsham, having pounced on a Goldfinch, which was used as a call-bird, in January 1850. It was an old male, in beautiful plumage; and in February 1852, two were shot near Pevensy by Mr. Vidler.

In December of the next year I had the pleasure of seeing one myself in this neighbourhood, and of watching it for some minutes as it sat on the top of an oak tree, moving its tail up and down with great rapidity. It was pointed out to me by a labourer, who had seen it on a lawn about half a mile from Cowfold. It very soon darted into a thicket and disappeared. At this time there was a severe frost. On the 15th of February, 1853, another was shot at Shipley.

Some years after this, in March 1881, happening to be at Eastbourne, I saw one of these Shrikes come in from the sea, and remarked its very undulating flight, like that of a Woodpecker. In Mr. Jeffery's private notes, he records one killed at Jevington on 19th November, 1861.

The 'Zoologist' records:—One taken near Lewes in a clap-net while attacking a call-bird, February 3rd, 1849 (p. 2152); another at Worthing, in 1859 (p. 6606); a third at Pevensy, in 1866 (p. 9655); and a fourth at Sidlesham, in 1868 (p. 2059, s. s.), as well as a female shot near Brighton, mentioned in the vol. for 1880 (p. 147).

RED-BACKED SHRIKE.

Lanius collurio.

UNLIKE the preceding, this bird makes its appearance with great regularity about the middle of April, and is, in fact, a summer immigrant. Although decidedly local, it cannot be called *uncommon*.

It may be seen occasionally between the South Downs and the sea, but the north side of that range, throughout its whole length, may, I think, be considered its favourite haunt. Nevertheless it is fairly distributed throughout the inland parts of the county, especially in the more open districts of the Weald.

The habit of these birds of stationing themselves on the extreme point of the highest portion of a tree or bush renders them very conspicuous. Any person travelling along the roads may, year after year, at some particular spot, or within a few yards of it, observe a single male or female perched in this position, probably on the lookout for any passing insect, or on duty as sentinel.

Its habits and food are very similar to those of the Great Grey Shrike. In my younger days, when high hedges were far more common than they are now, I have often found in them the nest of the Red-backed Shrike. Owing to modern ideas of agriculture, birds in general are losing such places of security, and many are driven to build their nests in situations liable to discovery, and to their consequent destruction.

I may observe in conclusion, that the eggs of this bird in one nest, often differ so remarkably from those in another, that they might easily be supposed to represent the product

of at least three different species, though those in the same nest are always similar. Several gamekeepers have told me that they have shot this bird in the act of drawing out young partridges and young pheasants from the coops.

WOODCHAT SHRIKE.

Lanius auriculatus.

THIS species is exceedingly rare in Sussex, and indeed in Britain.

I have met with only one specimen myself, of which I find the following note :—" On the 11th of May, 1866, I saw, at Mr. Pratt's shop in Brighton, a beautiful specimen of *Lanius auriculatus* in the flesh, which he told me had been shot at Preston, near that town, on that same morning, by one of his sons. It was in the fullest plumage of the adult male. The stomach contained portions of beetles and other insects. This is no doubt the specimen which is mentioned in Yarrell's 'British Birds' (vol. i. p. 216), as also in the 'Zoologist' (p. 266, s. s.). This species is not included by Mr. Knox in his list."

MUSCICAPIDÆ.

SPOTTED FLYCATCHER.

Muscicapa grisola.

THIS bird generally arrives in the county about the 4th of May, and very commonly returns year after year to an

accustomed spot, building a nest, or repairing an old one, on the branch of a vine, or some other fruit-tree, trained against a wall, generally taking great pains to conceal it from a passer-by, though it is very often a pretty large mass. At other times it will place its nest against the upright stem of an oak, or other rough-barked or lichen-covered tree, and in that case it is usually very small, and so neatly woven into its surroundings that it is very difficult to discover. It is, as a rule, composed of moss and lichen externally, perhaps mixed with a few roots and feathers, and is lined with horse-hair and other soft material.

In one instance, a nest was found on the moulded architrave of a window of my own house, entirely composed, externally, of the blossoms of the Turkey oak, and lined with a few horseshairs, feathers, and red worsted. I have twice found the eggs of this species plain light blue, without any markings at all. It is fond of sitting on a rail, or the point of a branch, whence it pursues its insect prey, returning constantly to the same spot.

I have known it to select the top of a beehive, and to make a raid every few minutes on the bees, as they were returning with their honey. It leaves this country for the winter about the middle of September.

It does not appear to possess any song, and is the most silent of all our small birds.

Mr. Jeffery, in his private notes, states that this species uses spiders' webs freely for its nest, collecting them from the corners and crevices of buildings while hovering on the wing.

PIED FLYCATCHER.

Muscicapa atricapilla.

A RARE visitor to the southern counties. Two specimens were obtained at Lancing, on May 17th, 1873, and about the same time another, a male, was picked up dead at Sunt, near Lindfield. I examined all of these.

On April 10th, 1853, my notice was attracted by the extreme whiteness of the breast of a bird high up in an oak tree, in my own grounds at Cowfold, and not knowing what it was, I shot it. It proved to be an adult male of this species, and is now in my own collection. Mr. Knox mentions one killed in 1837 at Halmaker, and another at Moulscombe, near Brighton. Mr. A. F. Griffith, of that town, informs me that he saw a Pied Flycatcher near the Hassocks Station of L.B.S.C. railway in May 1888.

The following notices of the Pied Flycatcher in Sussex appear in the 'Zoologist':—(p. 3174) a male shot at Firle Place, in May 1851; (p. 6605) eight occurrences near Worthing, between the spring of 1853 and that of 1858; (p. 497, s. s.) a female shot at Uckfield in 1866; and (p. 4691, s. s.) one is mentioned which flew into an open window of the Grand Hotel, Brighton, in October 1875, and was preserved by Mr. Swaysland.

In addition to these, Mr. Jeffery records two seen in the neighbourhood of Chichester, in May 1881 (p. 49, vol. for that year).

Its note is a low warble commencing *zic, zic, zic*.

ORIOOLIDÆ.

GOLDEN ORIOLE.

Oriolus galbula.

THIS species can only be considered a very irregular visitant. The greater number have occurred in spring.

In my own collection I have two males which were shot at Charleston, near Alfriston, in May 1833; and in the same month of 1853 I saw a male which had been shot at Erringham, near Shoreham. A few days afterwards another was seen in the grounds of Lady Lloyd, at Lancing, in the same neighbourhood.

In this same year, 1853, I was told by Mr. Dennis of another example which had been shot by Mr. King, of East Blatchington, on the 14th of June. It happened in this way: he had taken his gun to shoot some Starlings which had annoyed him by building their nests on each side of his front door, making a great mess, and while he was looking out for them, a bird flew into an elm tree opposite, which he shot, and finding it was not a Starling, sent it to Mr. Dennis. It proved to be a female Golden Oriole, and shortly afterwards I saw it at Mr. Swaysland's.

In May 1866 two male specimens were shown me by Mr. Pratt, of Brighton, which he had just received in the flesh from Lewes; and in the same month a male and female were shot by one of his sons, on the lawn of Preston Place, near Brighton, which I also saw; these latter were bought by the late Bishop Wilberforce.

Mr. Whitaker, of West Grinstead Park, possesses a young male specimen, which he told me was shot at Dial Post, in that parish, by one of his keepers, on the 28th of June, 1888.

Many years ago, I have unfortunately lost the date, I had the rare pleasure of seeing no fewer than *fourteen* of these beautiful birds sunning themselves on an old thorn-bush on Henfield Common, and got within some forty or fifty yards of them. I have never heard of any other instance of so large a number having been seen together. A pair of this species frequented for some time a garden at Fittleworth, and would, no doubt, have bred there, but they were unfortunately shot, although every effort was made to keep them from being disturbed.

In the 'Zoologist' it is recorded (p. 268, s. s.) that a male Golden Oriole was picked up dead, at East Grinstead, in May 1866; and at p. 334, s. s., is another note on Sussex specimens.

CINCLIDÆ.

DIPPER.

Cinclus aquaticus.

THE Dipper, or Water Ouzel, has very rarely been met with in Sussex. In a list of birds compiled by Mr. Thos. Woolgar, who died in 1821, printed in Horsfield's 'History of Lewes' (Appendix, p. 18, vol. i.), one is stated to have been shot at the mouth of the Ouse near Newhaven. A second is recorded by Mr. J. H. Gurney, 'Zoologist' (p. 2848, s. s.), which he saw at Mr. Gasson's, the naturalist, at Rye; it had the usual chestnut band on the lower part of the breast; and another is mentioned in the same journal for 1884 (p. 471) by Mr. Thos. Parkin, of the Vicarage, Halton, Hastings, as shot on the "Salts" at Bopeep, St. Leonards-on-Sea, on September 13th of that year.

TURDIDÆ.**MISTLETOE THRUSH.***Turdus viscivorus.*

THIS species, though not so abundant as some of its congeners, is generally diffused throughout the county, frequenting the small copses and open pastures where there are high trees.

It is generally known here as the “Screech;” and, from its habit of persistently singing from the top of some lofty tree, during a heavy storm of wind and rain, it is also frequently called the *Storm Cock*, also the *Holm Thrush*, from its partiality to the holly or *holm*-bush, for the sake of its berries. Although it may be considered a very wild bird at all other seasons, yet in the spring time it becomes exceedingly bold, and enters our gardens and orchards, where it builds its nest in the most conspicuous places, and in its defence will fearlessly attack, and generally drive off, every bird, of whatever size, which may presume to approach it. Then, after it and its family have enjoyed the *fruit*, particularly cherries, and the protection of our gardens, the little party betake themselves to the open country, and even to the bare downs, till, on the approach of winter and hard weather, they assemble in flocks, and resort to the berry-bearing trees, more particularly to the holly, the mountain ash, and the haw, on which fare they become exceedingly plump, and, being by no means bad for the table, are much persecuted by juvenile gunners.

This species receives large accessions from the continent in the autumn. I may add that Gilbert White says, “The Magpies, when they have young, destroy the broods of

Missel Thrushes, though the dams are fierce birds, and fight boldly in defence of their nests. It is probably to avoid such insults that this species of Thrush, though wild at other times, delights to build near houses, and in frequented walks and gardens" (see 'Natural History of Selborne,' edit. of 1802, vol. ii. p. 165). On the 14th of February, 1859, my gardener, hearing a great clamour of birds on the other side of a wall from where he was working, went to see what was the matter, when he saw a Missel Thrush take its departure from a Hawfinch, which he picked up in an insensible state. As it got better, I put it in a cage, where it soon got apparently all right, and cracked some hawthorn-stones; but a few hours after was dead.

SONG THRUSH.

Turdus musicus.

EXTREMELY common everywhere, frequenting our gardens and shrubberies, and when the time comes taking heavy toll from fruits of all kinds. In return, however, for these depredations it repays us with its charming melody throughout the year, though more especially in the spring. It destroys, too, an enormous quantity of earthworms and snails, bringing the latter to some favourite stone to break, where numbers of the shells may frequently be found, and returning again and again to this selected spot.

This species is resident, receiving large additions from the *North*, of natives, and from the *East*, of arrivals from the continent in summer and autumn. It seems to be one of the earliest resident birds to be affected by the cold, and is frequently found dead on a sudden accession of frost, though, as a rule, it retires to the coast, where it finds an abundant

supply of food, and roosts among the tangled herbage of the mud-banks, which are covered by the highest tides only. The Sussex name for the Song-Thrush is *Greybird*.

REDWING.

Turdus iliacus.

A REGULAR winter visitant, although occasionally a few remain as late as April, which has led some to suppose that it has bred in this county.

It generally arrives in October, when it resorts to the grass land and enclosures, feeding on worms, &c., and not taking so much to berries as the other species of the genus.

This bird does not seem to be forewarned by its instinct of the approach of severe frost, so that I have often seen numbers so overcome by the cold as scarcely to be able to escape the prong, or shovel of the labourer, spreading the dressing in the meadow.

It is said to roost on the ground, in pastures overgrown with grass or rushes.

I have often seen little parties of this species in the enclosures in Brighton, and particularly in the Pavilion Gardens, where, in March 1889, several were walking about within a few yards of my feet.

FIELDFARE.

Turdus pilaris.

THIS species, like the last, is a regular winter visitor, but occasionally appears as early as the second week in

September. It arrives in some years in very large flocks, and betakes itself to the open country, and particularly to meadows.

Its habits in general do not differ much from those of the Redwing, but it is rather a wilder and hardier bird, and does not scatter in so small parties over the country, and, when disturbed by gunners, soon becomes very wary and difficult of approach. The Fieldfare does not breed in this country. It has generally left us by the end of April, though I have once or twice seen one or two as late as May.

The call-note is very harsh, but it is said to have an agreeable song. This bird breeds in large societies. The Sussex name for it is "*Felt*," or "*Pigeon Felt*," I imagine from the blueness of its plumage, not from its size, for it is certainly not larger than the Mistletoe Thrush. The berries of the holly, the juniper, the mountain-ash, and the hawthorn, as well as worms, &c., collected in the meadows, form its principal food.

BLACK-THROATED THRUSH.

Turdus atrogularis.

As the only British specimen I have ever seen is that mentioned in Yarrell's 'British Birds,' 4th edit. vol. i. p. 276, I will merely quote therefrom:—"Of this species a young male example, shot near Lewes, December 23rd, 1868, was, on the same day, taken to Mr. T. J. Monk, of that town, and now forms part of his choice collection. Mr. Gould recorded the capture in 'The Ibis' for January 1869 (p. 128), and a note to the same purpose, from the owner of the specimen, is printed in the 'Zoologist' for February (1888, p. 1560), while the latter permitted Mr. Rowley, who himself saw the

bird before it was skinned, to exhibit it at a meeting of the Zoological Society, on the 14th of January (Proc. Zool. Soc. 1869, p. 4)."

BLACKBIRD.

Turdus merula.

THE Blackbird is the most common of the Thrush family, abounding on our lawns and in our shrubberies, among which it is one of the earliest to build its nest, and where it frequently brings up several broods in a season. It feeds greatly on various fruits, and devours large quantities of worms and snails. After the breeding-season, it resorts a good deal to the copses, and narrow strips of underwood and timber, which so commonly divide the fields in the Weald of Sussex, and are known as "*Shaws*."

But, although it is the hardiest of all our Thrushes, it betakes itself to the sea-shore on the approach of very severe frost, returning again to its inland haunts as soon as the weather moderates. It does not associate in large flocks, but is said to receive, in the autumn, considerable additions from other parts.

RING OUSEL.

Turdus torquatus.

THE first notices I have of the Ring Ousel in Sussex are, that a male was shot at Chestham, Henfield, in September 1839, and a female caught at Portslade, in Mr. J. Borrer's greenhouse; it seems to be very fond of grapes. On the

31st of October, 1840, I saw one which had been shot at Brighton a few days previously, and on the 21st of September of the following year, one shot at Westmeston. I also know of one, obtained near Lewes, as early as the 6th of April, and another occurred near Brighton in October 1842, and several more in the same month of the next year. On the 18th of September, 1853, I was walking up to the Rectory at Petworth, and my attention being attracted by their harsh note, I saw several Ring Ousels flying from a mountain-ash in the garden, and afterwards had a good view of them from a window, feeding on the berries. On the South Downs these birds still continue their migrations, as they did in the time of Gilbert White.

Mr. Knox merely observes that it is a passing visitor in spring and autumn, resting for a few days among the junipers and holly-bushes on our elevated commons and highest downs.

Mr. Booth, in his 'Rough Notes,' writes as follows :—" I possess the best evidence that a pair reared their young in the spring of 1865, in the lower branches of a stunted thorn-bush in a sloping hollow of the South Downs near Thunder's Barrow, between Portslade and the Dyke Hill, the juveniles being seen near the same spot, attended by the old birds, a week or so after they were observed in the nest. My informant also stated that the previous year a shepherd had told him that a bird, resembling a Blackbird with a white ring round the throat, had taken up its quarters in a ruined hovel in one of the valleys among the hills near Hangleton, the nest having been placed on the wall-plate in the space left where one of the rafters had fallen away. Though this Ousel is generally well known in this part of Sussex, a few being seen annually in spring while on the passage towards the north, and numbers frequenting the hills about Falmer, Patcham, and Portslade, during the latter end of autumn,

I fail to learn of other instances of this species remaining during summer in the county."

I cannot say that this story of Mr. Booth's is perfectly satisfactory, but I leave it to my readers to take it for what it is worth. The Ring Ousel feeds on various berries, especially on those of mountain-ash, the yew, and the hawthorn, as well as on worms and snails.

Mr. Ellman records, in the 'Zoologist' for 1850 (p. 2698): "The number of Ring Ousels passing southward during this autumn has been astonishing. Large flocks were seen continually on the Downs from September till nearly the end of October. No one can ever recollect their being so plentiful before." And Mr. W. Jeffery, writing from Ratham, near Chichester, under date 12th to 20th of April, 1866, states, with reference to the same bird, "a few . . . have been obtained during the migration; as a rule, they are not nearly so numerous nor so frequently met with here at this time of the year as in the autumn" ('Zoologist,' p. 266, s.s.).

Mr. Jeffery also states, in his private notes, that he has met with considerable numbers in Kingly Vale, near Chichester.

SYLVIIDÆ.

ALPINE ACCENTOR.

Accentor collaris.

As this species is strictly an inhabitant of rocky and mountainous districts, it has rarely been observed in the county, and only once by myself. This specimen I distinctly saw, and watched through a binocular for some minutes, on my own lawn at Cowfold, when it suddenly rose up and dis-

appeared round the corner of the house, and I could not find it again. I have lost the date. My attention was called to it by its shambling gait, and by the bright chestnut colour of its sides.

In Yarrell's 'British Birds,' vol. i. p. 297, it is thus written :—" Mr. Porter states ('Zoologist,' p. 5958) that on December 26th, 1857, two were shot on the Downs near Lewes, and Mr. Dennis, writing to me respecting the same specimens, informs me that they were shot near Hailsham."

HEDGE SPARROW.

Accentor modularis.

THIS generally diffused and unobtrusive little bird is one of the tamest and most familiar of all the inhabitants of our gardens, and is fond of frequenting the immediate precincts of our dwellings, where it diligently searches the drains and sewers, &c. Notwithstanding its peaceful disposition, it generally manages to hold its own very well in the numerous contests with its fellow pensioners for the food thrown out of window for the birds in general, in the winter. It is extremely hardy, never seeming to shift its locality in the severest weather, and even when the ground is covered with snow, it may be heard uttering its simple but cheering little song. Whether its note is of a sufficiently distinguished order to entitle it to its specific name "Modularis" I cannot say, but that it is a welcome addition to the monotony of a wintry morning I think will be readily admitted by all.

Its food consists principally of insects and vegetable matter. It has a peculiar habit of continually flirting up its wings as it moves about, which has given rise to the provincial name of "Shufflewing," but in this county it is generally known as the "Hedgepick."

REDBREAST.

Erithacus rubecula.

THIS appears to be a universal favourite, and from its confiding nature and familiarity has earned for itself in most of the countries it inhabits some name or other of endearment and affection.

Wherever the labourer may go, not only in the garden, but even in the distant woodlands, no sooner does he begin to break up the ground than the Robin is with him to pick up any worm or grub that he may happen to disturb, and may often be seen sitting on the handle of some tool which he may have cast aside.

Notwithstanding this tameness with regard to man, he is most pugnacious, and shows the greatest audacity should any other of his own species presume to come too near to his nest, or even to the part of the garden he may have arrogated to himself. He sings in the spring, but principally in the autumn and winter. The Robin feeds on berries and most garden fruits, and is especially addicted to red currants. Worms also, and chrysalids, form a considerable portion of his diet, and he is very fond of corn in general, more particularly of wheat. He feeds also on the berries of the mountain-ash.

Although he is resident he is partially migratory, and receives periodical additions from the continent. This bird is an early riser, and one of the last to retire at night. The materials of the nest appear to vary greatly, being sometimes moss, feathers, and hair, at another principally dead leaves. It is frequently found on the ground or on a bank, or perhaps on the wall-plate of an outbuilding, or a hole in a wall. I was once shown a nest in a lectern in the church of Ashington, and heard of another built under the seat of

a gentleman's carriage, where it hatched its young, but the carriage being one day wanted, food was put in, and the old bird was enclosed, but on returning home the young were found dead.

NIGHTINGALE.

Daulias luscinia.

AFTER all that has been written of this delightful songster there is no necessity for me to describe its habits, its habitat, or its history. But, sad to say, there is in my immediate neighbourhood a district wherein tradition saith that the Nightingale shall not be heard. A holy recluse, who had fixed his cell in St. Leonard's forest, is said to have been so disturbed in his devotions by its continual singing that he banished it from its precincts. Indeed some say that the recluse was no other than St. Leonard himself, but it is hard to put the saddle on the right horse at this distance of time, for the legend is at least as old as the days of Henry VIII., since, in the 'Boke of Knowledge,' by Andrew Borde, physician to that king, occurs the following passage:—"In the forest of Saint Leonarde's in Southsexe, there dothe never singe Nightingale, although the foreste rounde aboute in tyme of the yeare is replenyshed (*sic*) with Nightyngales; they wyl syng round aboute the forest and never within the precincts of the forest, as divers keepers of the foreste and other credible parsons dwellyng there dyd shewe me."* But whatever "credible parsons" say or said, I myself have frequently heard the aforesaid songster pouring forth his melody, regardless of consequences, in many parts of the forest.

* See 'Sussex Archaeological Collections,' vol. vi. p. 212.

BLUETHROAT.

Ruticilla suecica.

A FEMALE was killed near Worthing May 2, 1853, and is mentioned in Yarrell's 'British Birds' (vol. i. p. 322). October 1, 1862, a beautiful adult bird was seen by a boy on the South Downs, between Brighton and Stanmore Park, flying among the furzes from bush to bush. It was in the fullest plumage. It uttered no note, and on perching spread out its tail. The boy knocked it down with a stick, and took it alive to Mr. Pratt's shop at Brighton, where I saw it. It had been put in a cage and kept very much to the bottom of it, and even then spread out its tail to its fullest extent when disturbed. It looked all right, but Mr. Pratt, fearing it would spoil its plumage in the cage, soon afterwards killed it, and set it up for me, and I now have it in my own collection. In this specimen the spot in the centre of the breast is bright chestnut-red. It feeds on insects, but of its general habits I have no personal knowledge, and I can only add that to this county it is a visitant of the greatest rarity. Both these examples are recorded in the 'Zoologist,' the first at p. 3907, the second at p. 8281.

REDSTART.

Ruticilla phœnicurus.

THE Redstart appears about the middle of April, resting for a few days near the coast, especially in some grassy spot, even in towns, such as the lawns of the Pavilion at Brighton, and in Wellington Square at Hastings, in both of which places I have seen it picking up insects, worms, &c. It has

a very soft and pleasing note, but I have never heard it in Sussex, though frequently in other counties.

It is most common on the alluvial tracts between the Downs and the sea in west Sussex, and to the eastward about Hastings and Redhill. It is also occasionally met with on the sandy parts about Storrington and Henfield, and much more rarely in the clayey portions of the Weald. I have only seen three examples at Cowfold in forty years, one on my lawn in April 1849, and a male accompanied by a young bird in my orchard in 1852.

It breeds very sparingly in Sussex, in old fruit trees, in holes in the trunk, or in the interior of the thatch of some outbuilding, or in a wall. It builds a rather loose nest with a good deal of green moss externally, and lines it principally with horsehair and a few feathers, but is not very particular respecting the material, as I once found that it had made use of about a quarter of a yard of valuable lace, which it had stolen from a summerhouse where a lady had been sitting at work. It is remarkable that it should so seldom breed in Sussex, as I have frequently, in my younger days, found the nest in the very southernmost parts of Surrey, especially about Leith Hill.

BLACK REDSTART.

Ruticilla titys.

Is a regular autumn visitant to the coast, but appears to have been long overlooked, though one of the first examples noticed in England was obtained near Brighton (at Hove) in 1830 (Yarrell, B. B. vol. i. p. 333).

It generally arrives about October, but although it has occasionally remained as late as April, I am not aware that

the nest has ever been found in Sussex. With us it is very much confined to the seaside, and is fond of flitting about the rocks, or clinging to the face of the cliffs, and even to the parapets of the houses in Brighton, and it also has been observed to do the same at Worthing and Hastings. Its principal food is insects, but I once saw a quantity of hop-seeds taken from the crop of one which had been shot on a heap of manure, on which had been thrown some refuse from a brewery.

I have notes, made at the time, of an immature male shot in the neighbourhood of Brighton, October 20th, 1843, and of a female shot there November 20th, 1849, also of a finely marked adult male shot in Brighton Park, November 23rd, 1857, as well as of another male, obtained on March 7th, 1859, at Hill's Farm, near Horsham, an unusual distance from the sea.

Mr. Knox characterizes this bird as a winter visitant, and mentions several specimens of it as obtained from Brighton, and others from Chichester and Hastings.

References to the 'Zoologist' are:—(P. 188) "A Black Redstart was shot on a wall at Brighton, on October 16th, and another, also on a wall, in December 1839, and between the latter date and April 1843 three males and one female were seen and shot, all by Mr. Swaysland." (P. 2799) An adult bird killed at Piddinghoe, March 31st, and an immature male near Lewes, April 1st, 1852. (P. 3033) A female shot in a chalk-pit near Lewes. (P. 3329) One killed at Brighton, November 26th. (P. 9040) Another caught by a birdcatcher near Eastbourne, in November 1864, and again another, near Birling Gap. (P. 597, s.s.) A pair seen and female shot, at Ashling, in October 1862. (P. 3476) Another shot at Railton, near Eastbourne. (P. 3907) One taken near Worthing, 1853.

From the number appearing every year along the coast

since it was first distinguished, the Black Redstart can scarcely now be called a very rare bird; in fact it may be classed as a regular winter visitant, though in small numbers.

STONECHAT.

Saxicola rubicola.

RESIDENT, but less numerous, in winter, principally frequenting the masses of furze on the Downs, or the open heaths and commons more inland, where it may be seen perched on the highest points of the furze, constantly uttering its note, which has been compared to the sound made by knocking two stones together, hence the name. It also gives forth a rather pleasing little song while flitting about from bush to bush.

It feeds on insects, and particularly on beetles. In April it builds a rather large and clumsy nest of coarse grass and green moss, generally on the ground on the inside of a furze, or other bush (close to the bottom), and well concealed by thick herbage.

WHINCHAT.

Saxicola rubetra.

THIS little bird arrives about the middle of April. It is to be found in similar districts to the preceding, and particularly in large tracts of furze, but is more generally diffused, being partial to enclosed parts of the Weald, where it may often be found about the hedges of our meadows and culti-

vated fields, flitting about from bush to bush, feeding on insects and berries, particularly on blackberries.

I am not aware of its having any actual song, its usual note being a hurried repetition of the syllables "tic-tic."

It is fond of perching about on the haycocks in haymaking time, and builds its nest on the ground, formed of grass, and lined with the finer portions of the same.

In the northern counties "Whin" is the name of what we call "Furze," whence *they* call this bird "*Whinchat*" and we *Furzechat*, both, of course, from its fondness for that shrub. In some parts of Sussex it is also known as the *Barleyear*, though from what cause I have never been able to discover. This and the Stonechat are also known as the "Stonechucker."

WHEATEAR.

Saxicola ænanthe.

THE Wheatear is, I think, the earliest of our immigrants, as I was in the habit, some years since, of riding to a certain spot on the Downs every spring, on purpose to see if it had yet come, and there are few seasons in which I have not found it there on the 1st of March. It arrives sometimes in large numbers together. I remember on the morning of the 22nd of March, 1881, at Eastbourne, the beach about 7 A.M. was completely covered with them, and they were sitting in numbers on the small trees, and on the backs of the seats on the esplanade, and I saw also several parties of ten or a dozen arriving from the sea. They did not appear at all fatigued, and on my going again to the esplanade at 10.30 there was not one to be seen.

A celebrated old shepherd of the South Downs, in a com-

communication of great interest made to the late Mr. Blencowe, of the Hook, near Chailey, speaking of a time when, in 1882, he was head shepherd on Westside Farm, near Brighton, states thus :—"The farm extending along the seacoast, I caught great numbers of Wheatears during the season for taking them, which lasts from the middle of July to the end of August. The most I ever caught in one day was thirteen dozen, but we thought it a good day if we caught three or four dozen. We sold them to a poulterer at Brighton, who took all we could catch in a season at 18*d.* a dozen. From what I have heard from old shepherds, it cannot be doubted that they were caught in much greater numbers a century ago than of late. I have heard them speak of an immense number being taken in one day by a shepherd at East Dean, near Beachy Head. I think they said he took nearly a hundred dozen, so many that they could not thread them on crow-quills, in the usual manner, but he took off his round frock and made a sack of it to put them into, and his wife did the same with her petticoat. This must have happened when there was a great flight. Their numbers now are so decreased that some shepherds do not set up any coops, as it does not pay for the trouble."

Mr. Mark Antony Lower, in his 'Glimpses of our Sussex Ancestors,' p. 96, gives the following amusing colloquy between two old shepherds :—"One was telling the other how he had known the time when in a single year from forty to fifty thousand sheep had been washed near the spot where they were sitting. 'And now,' he exclaimed, 'there be none ! . . . As to *birding*,' he continued, in a still more doleful tone, 'birding is now all auver ; why I used to make quite a harvest of my birds ; twelve pound a year I have made of my birds, and one year I made fourteen pound eight shillings. We sent them, you see, to Burthelmsen (Bright-helmstone—Brighton), and otherwhile we catched so many

that the Burthemsoners couldn't take 'em all, and I myself have sent some to Tunbridge Wells. That was the time of dee, Old Boy, for shepherds.' ”

The song is rarely uttered except when the female is sitting close at hand, and the performer is generally perched on a stone, or some ant-hill overgrown with grass ; it is short and very pleasing, and is repeated every few minutes. On these occasions the bird is remarkably imperturbable, and I have heard it continue its song without showing the least concern while I have taken its loving partner from her nest in an old rabbit-hole.

The nest is usually a mass of short pieces of the fern generally known in Sussex as Brake (*Pteris aquilina*, the Bracken of the North), and moss, wool, and rabbit's fur. A rabbit's hole being the only place in which I have found it, the nest has always been too much pulled to pieces for me to see what might have been its form before it was disturbed.

To show how great a luxury these birds were formerly considered for the table we may look back to the time of Charles II., and I cannot refrain from giving the following extract from 'Sussex Archæological Collections,' vol. xi. (p. 32) 1859 :—“ In the coat of arms of the Wilsons well do the Wheatears deserve a conspicuous quartering. The finest and fattest birds were found on the Downs about Beachy Head ; and, alas ! in far greater numbers than is the case nowadays. They were a great card in Mr. Wilson's hand, and he played it freely and ably. Who shall say whether his loyalty or his Wheatears had most to do with his elevation to the rank of baronet, which took place almost immediately after the Restoration ? Certain it is that Charles II. was exceedingly fond of them, and equally certain that Mr. Wilson supplied his Majesty very freely.

“ Dr. Burton, writing to his daughter, tells her he had

heard that at a dinner given by the Earl of Dorset to the King and the Duke of York, they had eaten twenty dozen of them."

Again (pp. 83, 84) "I heare," writes the Earl of Dorset, "that my old friend Mr. Dr. Burton (the Rector of Broadwater) is nott at Bourne; but understanding you to dwell there, I am hopeful to procure the same friendly respects I was wont to receive from him. My request is, that when Wheatears are best, you would, for the short time they last, now and then oblige mee with some of them. I would not bee a beggar, as poore as I am, if they weare provisions to be bought for money in these parts; but since you are thereabouts a great, if not sole master of them, I am very willing to be beholdinge to you, with assurance that, whensoever it is in my power, you shall finde me

"Your very affect^e friend,

"July 30, 1646."

"DORSET."

Fuller, in his 'Worthies' (vol. ii. p. 382), thus describes them:—"Wheatears is a bird peculiar to this country, hardly found out of it. It is so called because fattest when wheat is ripe, whereon it feeds, being no bigger than a Lark, which it equals in the fineness of its flesh, but far exceedeth in the fatness thereof. . . . That palate man shall pass in silence, who, being seriously demanded his judgement concerning the abilities of a great lord, concluded him a man of very weak parts, because he once saw him, at a great feast, feed on chickens when there were Wheatears on the table." Mr. Harting, in his 'Summer Migrants,' very aptly remarks "that Wheatear is a corruption from Whitear, the white around the ear being very conspicuous in spring plumage of this species, or else it must be derived from the season of its arrival," and this latter is suggested by Mr. A. C. Smith, in his 'Birds of Wiltshire' (p. 152), as the true origin, adding "but then I submit that it cannot allude

to the wheat being in ear, when it reaches us in the middle of March, but must refer to the old meaning of *ear*, 'to plough,' and unquestionably the Wheatear does arrive when the ploughing and sowing of spring wheat is in operation." The quantity of open grassland on the South Downs being so much diminished of late years by ploughing, the immense number of these birds which rest upon them on their passage from the inland counties must, from mere want of space, be compelled to resort in considerable numbers to the fallows, and they have thence obtained the name of Fallow-chat.

I have never met with the Wheatear in the Weald in any number together, but only now and then two or three isolated birds, on some common or some open meadow on their first appearance, and again at the time of their departure. I have occasionally observed on the South Downs, though much more frequently in the birdstuffers' shops, a considerably larger race of Wheatear than those ordinarily met with. Though it has never been admitted as a distinct species, it differs not only in size, but in its habit of perching in trees when disturbed. The best published account of this race which I have met with is that of Mr. Booth, who, in his 'Rough Notes,' vol. ii. says thus:—"In addition to the bird which arrives on our coast in March and early in April, a larger variety makes its appearance at a somewhat later date. This form is seldom seen before the middle of April, and continues to land till the end of the first or second week in May. It is perfectly correct that the common Wheatear seldom, if ever, perches on trees or bushes, though the large form, if disturbed, usually makes its way to a commanding position either on a twig or a hedgerow, or even on the topmost branches of some lofty tree. . . . I never succeeded in discovering the nest of the larger Wheatear. I have, however, been assured, by persons



J G Keulemans del et lith

Mintern Bros. Chromo lith

THE RUFOUS WARBLER.
Aëdon galactoeus

well acquainted with the variety, that these birds breed on the South Downs at times in rabbit-burrows, after the fashion of their smaller relatives. The eggs are described as being slightly marked with rusty blotches or spots. This information concerning their nesting I give for what it is worth, my own opinion being that this form only passes our islands on its way to the far North. . . . With regard to the habits of the two forms, they may be described as similar, with the exception of the far later date at which the larger form reaches our shores, and its predilection for perching on bushes or trees."

RUFIOUS WARBLER.

Aedon galactodes.

THE first example of this species obtained in England was shot by Mr. Swaysland, of Brighton, at Plumpton Bosthill, about six miles from that town, on the 16th of September, 1854. I quote from his letter to me, which I have before me: "When I first saw it I took it for a cream-coloured Nightingale, but as I had no gun with me I had to go four miles for one; when I returned it was near 6 o'clock P.M. I found the bird about twenty yards from where I first saw it, in some furze. There were no trees within quarter of a mile of the place. The bird was very shy, and I was quite sure it was not a common Nightingale, as it had more of the appearance and flight of the young of the Red-backed Shrike, and when alighted in the furzebush it did not stop in till I came near to it, but took a circle round, about sixteen yards from the ground, back to the same place from whence I first drove it. It was difficult to get within thirty yards of it."

I obtained the bird and sent it to Mr. Yarrell, from whom I received a letter stating it to be *Sylvia galactodes*; see 'British Birds,' vol. i. p. 356, where the words quoted are: "The bird, on dissection, proved to be a male, and would shortly have moulted, one or two of the young feathers of the primaries having made their appearance on each wing; these are darker than the old ones. The feathers also on the back and tail, especially the central ones of the latter, are much worn."

Respecting this bird I have no further personal knowledge, neither have I ever heard of any other specimen being obtained in this country. I recorded it in the 'Zoologist,' p. 4511.

GREAT REED-WARBLER.

Acrocephalus arundinaceus.

ALTHOUGH the specimen was not obtained, I venture to insert the following taken from the private notes of Mr. Jeffery:—"1885, July 26. Saw a bird in Ratham garden, which I feel satisfied was the Thrush-like Warbler of Yarrell, *S. turdoides* of Gould's 'Birds of Europe.' The note was harsh and guttural, and reminded me of the Ring Ousel. It had also another note, a high-toned shriek. I had a good view of it close, and noticed positively that the tail was wedge-shaped, size rather larger than the Nightingale, which bird it much resembled in colour."

REED-WARBLER.

Acrocephalus streperus.

THIS little bird arrives late in April, and as a species is somewhat local. It is seldom found far from water, though the nest has occasionally occurred at some considerable distance from it. Soon after its arrival it betakes itself to the reed-beds of our river banks, or to those ditches in the marshy levels through which those rivers generally flow for a few miles before reaching the sea; there it forms its nest among the reeds in such a manner as to be supported by two or three, or three or four, reed-stems carefully woven into its structure, and as the reeds are constantly swayed to and fro by the winds, it is constructed of unusual depth, by which the eggs are not liable to be thrown out.

The Cuckoo very frequently selects the Reed-Warbler as a foster-mother to its young.

Its food consists of insects and small mollusca. It is rather silent during the day, only occasionally uttering a sort of chatter, but after sunset it suddenly breaks out into song and continues singing incessantly throughout the night.

It may be met with in suitable spots about most of the large reed-fringed ponds in the county, particularly some of those in St. Leonard's Forest, and had at one time a favourite haunt on the Salts Farm, not far west of the old bridge at Shoreham, over the Adur, but on the opening of the railway the birds forsook the place. It is still abundant on the banks of the Arun, from Burpham to Amberley, though about the latter place it is becoming less numerous owing to the draining of the marshes.

SEDGE-WARBLER.

Acrocephalus schænobænus.

ARRIVING in April, and spreading immediately over the county, it betakes itself to some sedgy willow-plot, or to the borders of some ditch or brook overgrown by aquatic herbage, or even to the banks of ponds and pits. Here, among stunted hawthorn or other bushes, browsed down by cattle or nibbled by rabbits, it frequently builds its nest. I have more than once found it in a bean-field by the water, where the crop was bound down by the white convolvulus, aptly called in Sussex, and probably in other counties, the "bind-weed." A field of beans, if near any pond or brook, has certainly a peculiar attraction for this bird, and it is fond of sitting and singing among them, probably because it is there well concealed and can find a plentiful supply of aphides and such like congenial food.

It is not so much attached to reed-beds as the preceding species, and not being so much exposed to the winds, its nest is more open and not so deep. It keeps up a constant chattering by day and during the greater part of the night, and, should it be a short time silent, its song will be at once resumed should a stone be thrown into its place of concealment.

It not unfrequently sings on the wing while mounting up to a considerable height on to a willow or other tree near the waterside, rising to its perch with a quivering flight, and descending again to the thick herbage, very much in the manner of the Tree-Pipit, when, after rising in the air, it returns to the highest point of a tree or bush. Like most of its congeners it leaves the country in September, in the early part of which month I have often flushed a considerable



J. S. Keulemans, del. et lith

Mintern Bros. Chromo lith

THE AQUATIC WARBLER.
Acrocephalus aquaticus

number of them, while shooting in the turnips on the north side of, and in close proximity to, the South Downs. Mr. Jeffery, in his private notes, states that it imitates the song of the Willow-Warbler.

AQUATIC WARBLER.

Acrocephalus aquaticus.

THE first example of this species which had then been recognized in England, and the only one which has yet been recorded as having occurred in this county, was shot by Mr. Pratt, of Brighton, on the 19th of October, 1853, from whom I obtained it. Though I took it at first to be a very bright example of the Sedge Warbler, I was never perfectly satisfied about it, and on showing it to Professor Newton he at once pronounced it to be the above species, and most kindly exhibited it at a meeting of the Zoological Society (*vide* Proc. Zool. Soc. 1865, p. 210).

Till Professor Newton saw the example in my collection this species had never been included in any work on British Ornithology. I confess, therefore, that I did not know what it was. Its habits are, doubtless, very similar to those of the preceding species, but, as I have never even seen the bird alive, I can say nothing of them from personal knowledge.

In the 'Transactions of the Norfolk and Norwich Naturalists' Society' for 1871 and 1872, Mr. J. H. Gurney remarks: "I cannot help thinking that the Aquatic Warbler often occurs in this country. . . . There can be no doubt that the figure in Hunt's 'British Birds' was taken from one in all probability obtained in Norfolk, but there is no letterpress to accompany it."

GRASSHOPPER-WARBLER.

Acrocephalus nævius.

THIS, like most of our immigrants, arrives in the county in April, departing in September. It is by no means uncommon, and, provided there is sufficient concealment, it does not seem at all particular in the choice of its locality; neither does the immediate vicinity of water appear to be requisite.

For its nesting purposes, however, it chooses some tangled hedgerow, or some spot in a thick furze-field, where the ground is overgrown with long grass and close-growing herbage, and the nest is most carefully concealed. It is fond of placing it in a wheel-rut close to a hedge and overgrown with weeds, and when approaching or leaving it, is careful not to show itself within forty or fifty yards of it, which makes it extremely difficult to discover the nest, the rut being often full of brambles and rough bushes. As a proof of the difficulty of finding the nest, I am quite sure that one pair at least have, for the last forty years, bred within a hundred yards of my house, but I have sought it in vain. Besides the places I have mentioned, this bird frequently builds in marshy spots covered with sedge or flags. I have never found the nest myself, but my son brought me the eggs from one he found some years ago in St. Leonard's Forest.

That the bird is so little known is hardly to be wondered at, as even its trilling note would not strike an ordinary observer as having anything to do with a bird, and might easily be supposed to proceed from a cricket or grasshopper, and should he catch sight of it in the cover, its movements are so much like those of a mouse, that he might easily mistake it for one. It is, moreover, frequently a difficult matter

to ascertain from whence the sound proceeds, which may perhaps be accounted for by the habit which the bird has while uttering its note of turning its head in all directions. I once watched a Grasshopper-Warbler from a seat in a summerhouse, not more than eight or ten yards distant from it, and was surprised to see that, while pouring forth its note, its mouth appeared to be wide open, and I could not detect the slightest movement of either mandible, but it might have been too rapid for my eye to follow. During all this time it kept up a constant quivering with its wings.

DARTFORD WARBLER.

Melizophilus undatus.

THIS bird is found locally in many parts of the South Downs, where it is resident. I have also frequently seen it when shooting in turnips near the northern slope of those hills, and have traced it from Dover to the Land's End.

It is occasionally found on furzy commons further inland. It is not so abundant in the locality named as it formerly was, partly owing to the nests having of late years been taken in considerable numbers, and to heavy snows having broken down the furze.

Mr. Knox mentions a nest having been taken on the 3rd of May, 1844, on the "Broyle," near Chichester.

In the 'Zoologist' (p. 3113) Mr. Ellman gives an interesting account of the manners of the Dartford Warbler, and mentions a female shot by him on the 12th of October, and a male, on the 7th of November, 1851. Mr. Wilson states, in the same journal (p. 6606), that in the neighbourhood of Worthing, a male and female were taken in the summer of 1853, a male in 1857, and young in 1858. At

p. 59, s.s., Mr. Booth writes of the same bird, that it generally feeds its young on the bodies of a large yellow moth, and that in winter, he has several times met with it among stunted thorn-bushes and straggling furze, on the beach between Eastbourne and Pevensey.

Mr. Harting mentions that he shot a male specimen on Bepton Hill, February 16th, 1863. Mr. Jeffery also observed a pair on Heyshot Common, near Midhurst (see 'Zoologist' for 1881, p. 49); and Mrs. Merrifield, in her 'Sketch of the Natural History of Brighton,' speaks of the Dartford Warbler as a very scarce bird (pp. 167, 168).

In a letter from Mr. Ellman, dated April 29th, 1852, he informs me that young Dartford Warblers can fly well, and that instead of being a late breeder, it is the earliest he knows of. He says:—"Yesterday I saw thirty or forty full-grown young ones, but with the tail-feathers only an inch in length, and the bill only half grown." He further says that he has found these birds in considerable numbers on parts of the South Downs about Lewes and Seaford.

I am not aware that it has any provincial name in Sussex, but in Dorsetshire, on the heaths about Bournemouth, it is known by the cowboys by the remarkable title of "The French Blackbird," and indeed it is not inapplicable, for few, if any, birds that are not black, look darker when on the wing.

WHITETHROAT.

Sylvia rufa.

THIS species makes its first appearance in April, but it is not till May is pretty well advanced that it arrives in any considerable numbers. It is then in very bright plumage,

having the breast almost pink. After the breeding-season it becomes much duller, assuming a somewhat faded appearance. It frequents hedgerows and plantations, where it may often be heard and seen, as it has a habit of rising suddenly a foot or two above the top of a hedge, singing loudly, jerking its tail, flitting about for a moment, and then disappearing again into its thickest parts.

It feeds on insects, though, from its great partiality to the rows of pea-sticks in the kitchen garden, it is generally accused of doing great injury to the crop, and devouring great quantities of peas, whereas it is engaged in the search of aphides and caterpillars. It does, however, take a fair share of currants, and delights in raspberries. It generally nests in the roughest brambles near the ground, and from its being partial to thick beds of nettles, it has obtained the name of Nettlecreeper. The Whitethroat composes its nest of dead grass, and is specially fond of using the stalks of the common white *Galium*, generally known as lady's bedstraw, lining it very slightly with horsehair.

LESSER WHITETHROAT.

Sylvia curruca.

IN the Weald this is less abundant than the former species, though all along the coast it even exceeds it in numbers.

It arrives about the middle of April, and usually remains with us till the end of September, feeding on insects and various berries, particularly those of the ivy, the elder, and the privet. It is not so noisy as the preceding, its notes, though abundant, being pitched in a lower key. If any one approaches it when it has young both parents show the

greatest alarm, flitting from branch to branch, and uttering unceasingly a note resembling the syllable "churr," repeated over and over again with the greatest rapidity.

The nest is formed of the very finest bents of dried stalks, generally of umbelliferous plants, with the hairs of horses and cattle, and is placed in the middle of the thickest bushes.

GARDEN-WARBLER.

Sylvia salicaria.

THE Garden-Warbler arrives late, and does not make itself heard in the Weald earlier than the end of April. It is a very shy and retiring bird, being much more often heard than seen. In my own neighbourhood it generally, at first, conceals itself in low bushes in copses and hedgerows, or in shrubberies, and it is not till it has been some time in the country that its notes are heard from the tops of the oaks and other high trees. In fact I do not think it is heard much before the hen is sitting on its nest. From that time it continues to sing from the tops of the trees till the end of July or the beginning of August. It is very fond of fruit, for which it enters our gardens, and pays special attention to the cherries, whence it has obtained the name of "Cherry-sucker;" it feeds also on many other berries, especially those of the ivy, the privet, and the elder. It builds a rather slight-looking nest, though firmly put together, and consisting of the lightest dried grass and goose-grass, lined with cow's hair and a little wool.

To my mind, its song, though often much more continuous, is not so attractive as that of the Blackcap, nor does it conclude with the clear flute-like notes of that species. The

editor of Vol. I. of the 4th edition of Yarrell's B. B. informs us that it was first made known as a native of this country by Willughby.

BLACKCAP.

Sylvia atricapilla.

THE Blackcap, the Wheatear, and the Chiffchaff are, I think, the earliest of our immigrants to herald the glad tidings of the approach of spring. I have several times heard the very pleasing note of the Blackcap as early as the 1st of March. Like the Garden-Warbler it is very fond of fruits and berries, and it appears to have the same predilection for cherries, privet, and elderberries.

The nest also is very similar, but the bird is much more familiar, and often places it in shrubberies, where it seems rather to court its destruction by selecting some loose and open-growing bush such as the snowberry, in one of which, in my own garden, a nest was built for four consecutive seasons, presumably by the same pair of birds, or by the advice of a survivor of a former tenant of the nest.

I have not noticed that it betakes itself to higher branches of the trees, but it appears rather to prefer the lower shrubs and bushes. It leaves the country early in September. Mr. Jeffery remarks, in his private notes, that the Blackcap feeds on ripe figs, the berries of the *Daphne mezereum*, and those of the mountain-ash, which it swallows whole.

ORPHEAN WARBLER.

Sylvia orphea.

THE only reason to suppose that this species has ever occurred in Sussex, is the statement made by Mr. Gould, on Mr. Howard Saunders's authority, and repeated in the fourth edition of Yarrell's B. B. (vol. i. p. 424), to the effect that eggs believed to have belonged to it have been taken at East Grinstead.

WOOD-WREN.

Phylloscopus sibilatrix.

GILBERT WHITE seems to have been the first to clearly distinguish this species, though it is stated in Yarrell's 'British Birds' (vol. i. pp. 386, 428, note) that Johnson, of Brignall, in Yorkshire, had described it to Ray. It is a summer immigrant, somewhat local, arriving in the first or second week in May, when, after passing over the Downs and the clays of the Weald, and remaining a few days among the high trees on its route, it settles its abode in the large woods of beech and oak in the dry or sandy districts; Stanmer Park, however, though on the chalk, is one of its favourite haunts. It is particularly abundant in St. Leonard's Forest, where its loud sibilant note may be heard in all directions, keeping up the while a constant shivering of its wings. It has also, when the female is sitting, another note, resembling the syllable "chee" three or four times repeated. It lives entirely on insects, occasionally capturing them on the wing. It builds its nest on the ground, generally among drifts of

dead leaves, and under the shelter of a tuft of herbage or a small bush. Its nest is constructed of dry grass and moss, with dead leaves, and lined with hair, feathers being never used, and is generally artfully concealed, but easily discovered when the female is sitting, by watching the male, who is serenading her from a neighbouring tree, and after a time descends in a somewhat parachute-like style, and either feeds his spouse or takes her place upon the nest. This being oval, domed, with an opening at the side, has in some districts given this species the title of "Oven Bird." It has been shot as early as the 1st of May, and departs in September.

WILLOW-WREN.

Phylloscopus trochilus.

THIS is a regular spring visitant, arriving in little parties sometimes as early as the second week in April, and now and then continuing to do so till as late as the second week in May. Immediately on its reaching the coast it proceeds to the hedges and gardens, and is soon very abundant all through the county, and its short, low, and somewhat monotonous little song may be heard in every direction. It feeds entirely on insects, especially on aphides, and is very useful and diligent in its search of them among our roses and other cultivated plants. It does not frequent the large timber woods, but prefers those in which the underwood is thick and close. It places its nest on the ground, or on the weedy and overgrown edge of a ditch, in some tuft of grass, sheltered, in most cases, by a thick bramble or the coarse herbage itself, constructing it of dry grass and moss, or

occasionally of dry fern. The main body leaves us in September, though in a few instances the bird has been known to remain as late as December.

CHIFFCHAFF.

Phylloscopus collybita.

IN its habits, locality, and food this species is precisely similar to the last, but in its mode of nesting there is a slight difference, as this bird, though sometimes building on the ground, more frequently places its nest in a low bush, or on an ivy-covered stump or thick bush, or in a climbing rose from eighteen inches to four or five feet from the ground. It often collects a considerable mass of dead leaves and moss, or white lichen, looking as if accidentally lodged there, and, like the last-named species, always lines it well with feathers. I am not aware that it has any other note than that from which it derives its name.

GOLDEN-CRESTED WREN.

Regulus cristatus.

THIS little bird is resident, receiving considerable additions from abroad, arriving for the most part upon the east coast in the autumn. Some, however, it would appear, cross the channel for the coast of Sussex, a number having been occasionally taken in an exhausted state on board the Brighton fishing-boats, as much as forty miles out at sea. Two, both males, which were so taken came into my possession. I once saw a very large number of these little birds which,

after a heavy gale from the S.E., had been thrown ashore a little east of Yarmouth, in Norfolk. !

Were it not now well known that it crosses the sea it would appear almost incredible, as in its usual haunts it rarely flies more than a few yards. It is a confiding and gentle little bird, frequenting our plantations, especially where there are fir-trees, particularly the spruce, on the underside of a branch of which it often suspends its nest. It sometimes, however, makes use of a lichen-covered larch for that purpose, as well as the juniper, Virginian cedar, spruce, or yew. The nest is formed very neatly and compactly of very fine moss, thoroughly worked together with spiders' webs and wool, and lined with the finest hair and small feathers. I once found one on the flat surface of a bough of a cedar, sunk in between two of the lateral branches.

Its habits partake a good deal of those of the Willow-Wren and the Tits, and it often accompanies these birds in the winter in little parties as they flit through the under-woods from bush to bush, or tree to tree. I suppose that many of these little birds congregate towards the coast with a view of again passing the sea, as they are certainly much more abundant in the winter than in the summer months.

FIRE-CRESTED WREN.

Regulus ignicapillus.

THIS species appears in this country in small numbers and at very irregular periods. I have never heard of its breeding in the county, and I do not know of any instance of its having been obtained later than April.

Its habits and manners are very similar to those of the Golden-crested Wren.

On November 5th, 1843, a specimen was brought to a Brighton birdstuffer by a little girl, who said she had found it dead in a garden close by; this was a very handsome male. A female was caught alive in December 1846, in a shrubbery at Lancing, with the lantern and bell.

Early in November 1852, a specimen was killed with a stone near Worthing, and on the 10th of the same month in 1854, a male was found dead at Shoreham. These three specimens are now in my possession.

In March 1854, Mr. Dennis informed me that a Fire-crest had been brought to him which had flown into a window of a cottage at Seaford. It was put into a cage, but was very restless, and lived only a day.

In the 'Zoologist' Mr. Ellman writes that he shot a Fire-crest on the 30th of March, 1849, in the garden of Mr. Honysett at Rye (p. 2418), and Mr. Potter records (on p. 2766) that a friend of his, while walking under some fir-trees overhanging a pond in the neighbourhood of Lewes, caught one in his hand as it was running on a fence in the manner of the Common Wren, January 30th, 1850.

In p. 8446 of the volume for 1863, a Fire-crested Wren is recorded, which was captured on board a collier lying off St. Leonards-on-Sea, on the 29th of December of that year. This was about a mile from the shore. In p. 9468 of that journal for 1865, one is stated to have been obtained near Plumpton by Mr. Swaysland on the 24th of December in the year before. In the volume of the 'Zoologist' for 1869 (p. 1513) one is recorded, without date, as having been obtained near Brighton, and in that for 1858 (p. 225) it is stated that one was caught on the 1th of April while fluttering against a window in North Street in that town; and on the same page two more specimens are recorded as having been killed near St. Leonards-on-Sea, and offered to Mr. J. H. Gurney, who added one of them to his collection.

One is mentioned by Mr. Jeffery, in his private notes, as having been obtained at Fishbourne on the 21st of October, 1863.

TROGLODYTIDÆ.

WREN.

Troglodytes parvulus.

THIS little bird, so often celebrated in our nursery-rhymes, and in them so curiously associated with the Robin, may be found in every part of the county, in the shrubbery, in the fagot-stack, in the cow-house, and in all the outbuildings of the garden or the farmyard; and the fear of man seems never to have been impressed on it. It may also be seen among the furze of the South Downs, on the wildest heaths of the open country, or in the closest hedgerows of the more cultivated districts; in fact, wherever it is likely to find a chrysalis or a spider there is the Wren. Insects are undoubtedly its principal food, but I have myself seen it picking off and eating red currants, and, when a boy, have often caught it in brick traps baited with nothing but wheat, but whether that was the object of its visit I cannot say. Considering the size of the performer, the loudness of its note is perfectly astonishing, and I well remember being absolutely startled by one of these birds suddenly bursting into song as I was passing a fagot-stack at twelve o'clock on a pitch-dark night, while I was walking with the patrol during the agricultural riots of 1831, in the neighbourhood of Chichester.

Few birds vary more in their choice of a place to build in; but perhaps the aforesaid outhouses may be mentioned as

most frequently selected, where, in a hole in the inside of a thatched roof, it forms a most conspicuous nest, externally of green moss, and internally of feathers and fine hair. I once found a nest near Henfield, against an ivy-covered oak, the outside of which was entirely composed of the skeletonized leaves of *Epimedium*, but was lined as usual. As this plant does not grow wild at all in the south of England, and I have never seen it in a cottage-garden, the Wren could nowhere have obtained the leaves but from my father's celebrated botanic garden, at least half a mile distant.

I have a drawing of a Wren's nest which was built in a bunch of old stirrups, which was hanging from a beam in a blacksmith's shop at Preston, near Brighton, and the birds succeeded in bringing up their young, notwithstanding that the hammers of the workmen were frequently passing within a few inches of them. I think the persecution of the Wren, in Sussex, is a thing of the past; but in my younger days it was a regular institution to hunt it at Christmas time, when numbers of boys, on both sides of the hedges, amused themselves by beating the bushes and throwing at the Wren whenever it showed itself, with knobbed sticks about eighteen inches long, called "libbets."

Many authors have mentioned the habit this bird has of beginning to build a number of nests which it never makes use of, and of roosting in little companies in holes in thatch, haystacks, and such situations. In severe weather I once took nine of them from an old nest in the inside of the thatch of a hovel. In some parts, especially in E. Sussex, it is thought unlucky to touch the nest. Strange as it may appear, the Wren has been occasionally found on the light-houses around the coast; though I am told that, compared with other birds, the appearance of the Wren at "lights" is very rare.

CERTHIIDÆ.**TREE-CREEPER.***Certhia familiaris.*

THIS is by no means an uncommon bird, though nowhere numerous, and appears to be strongly attached to particular localities, and is generally solitary or in pairs; it is never found far from old timber, as that of the old orchard or the woods. It is a lively little creature, in constant motion, and spends most of its time in diligently searching for insects in the cracks and crevices of the trees, among which the old oak and Scotch fir appear to be its favourites. On their trunks it climbs with a running jerking motion, chiefly in an upward direction, and proceeding spirally from the bottom of the tree to the top, in which it is greatly assisted by its stiff tail-feathers. It never appears to descend the tree, but on reaching the top flies rapidly to the bottom of another, and proceeds again as before. From its activity in climbing, it is generally known as the "Tree-climber."

As the time of pairing approaches, it utters a rather loud and very shrill little song, and chooses for its nest some place where the bark has been rent from the body of the tree, and is so left as to afford room for it between it and the bark. It is generally composed of pieces of straw and grass or fine sticks, and is lined with any soft material. In my own garden it has for several years placed its nest on the side of an old chicken-house, between the boarding and spruce-fir bark which had been nailed on but loosened by the wind. Part of the wall of this building had been covered with asphalted felt which had partially decayed, and of this I saw the bird collecting the fibres and carrying them to its

nest, notwithstanding that they smelt very strongly and were so black that I afterwards saw the seven eggs greatly discoloured by them. In a similar situation at the back of an old beehouse was a nest, the outside of which was composed of the dried flower-stalks of the Portugal laurel, and lined entirely with the cotton-like substance of the catkin of the balsam poplar.

At Henfield there was a nest in a very singular situation, having been placed in a hole caused by the partial decay of the post, and falling out of the mortar, by the side of the principal door of a cottage where people were constantly passing in and out. I was told that for several years this place had been made use of by Tits, but that this was the first instance of a Creeper taking possession, and that the birds had all been protected by the occupiers of the cottage.

The Creeper is resident and very hardy, accompanying in winter the parties of Tits in their excursions through the woods.

SITTIDÆ.

NUTHATCH.

Sitta cæsia.

A COMMON inhabitant of woods and orchards wherever there is large timber, where it breeds in holes, reducing the opening when needful, to its own size, by plastering with clay. It will take freely to boxes put up for the purpose. In March 1871, I placed some rustic nest-boxes in trees near my house. The next week two were taken possession of by as many pairs of Nuthatches, and in June, or the beginning

of July (I foolishly made no notes), on visiting one of the boxes, I found only two young birds nearly ready to fly. I took the box down, brought it into the house, and left it on the hall-table with the doors shut, for about an hour. I had not then seen or heard anything of the old birds.

I then started in my dogcart, with the box between my feet to keep it steady, for Henfield, $1\frac{1}{2}$ miles distant. When halfway there I saw a Nuthatch fly over the box close to my knees, and it chirped to the young birds; but I did not hear them answer, nor had I heard the young utter any note at all. I delivered the box and birds to my sister, who put them, box and all, into a cage under a verandah outside her bedroom window. The next morning she saw an old Nuthatch feeding the young ones, and the day after there were two old ones there, and these continued to visit the cage for a week or two, sometimes in the verandah, sometimes in the bedroom. The young birds became perfectly tame; but some months afterwards (my sister being from home) one was found dead, entangled between some wire and the bottom of the cage. The gardener, thinking to please her, caught a wild Nuthatch and put it into the cage, when it immediately killed the remaining young one.

How the old birds found out that the young were in the dogcart, after having been an hour shut up in my hall, has always been a puzzle to me. I thought at first the rest of the young had probably escaped up the tree, which was covered with ivy; if so, it is still more strange that the old birds should have followed the others $4\frac{1}{2}$ miles, and I think it would be too much to suppose that the birds would maintain both portions of their family at so great a distance apart.

In the month of September I had the pleasure of driving my friend Mr. Harting to Henfield, and found that the old birds still continued to feed the young, which were in a

large cage hung in the verandah. We watched for some time behind some shrubs, and saw both old birds bring food to the young in the cage. This somewhat curious circumstance is recorded in 'The Field' of October 4th, 1878. When in confinement the Nuthatch is rather given to killing small birds if put into the same cage. It is also most pertinacious in its attempts to escape.

When a boy I have more than once caught it in a brick-trap and, when left too long, found that it had ground the bill off about half its length. It is always in motion, running with equal facility in all directions, and is as much at home on the under as on the upper surface of a bough, or climbing upwards or downwards on the main stem. Its note is a cheery, and remarkably clear whistle, extremely variable, and often so powerful that it may be heard from a long distance.

It betakes itself in winter to the woods, and particularly to those of the oak, in the crevices of the bark of which it fixes the nut or seed which it wishes to crack, in the performance of which operation, it appears to throw its whole weight on its object, and on having extracted the kernel, it often leaves the shell so firmly fixed that it remains for months; and after having deliberately picked the kernel to pieces, it flies off in search of some other tempting morsel, such as the body of the common chafer, which is the favourite food of the young. The nest is almost always composed of dead leaves, particularly of the oak or beech, or, where obtainable, the laminae of the inner bark of the Scotch fir, among which the eggs may be often found scattered about, so that on visiting it one would suppose that no eggs had been laid; but a day or two before the bird begins to sit on them, they are carefully placed together. Six eggs, or seven, are the usual number for the first nest, though on a few occasions I have found eight. In two instances I have seen this bird entering and leaving a hole in a stone wall, in

which it evidently was making its nest. The Nuthatch is the only bird I have ever seen attempt, and succeed in, carrying away two grains of maize at once; of which, however, I do not see the advantage, as it invariably drops one while picking the other to pieces. It is also very fond of oats and fat, and I have watched it digging away at the horseflesh which has been hung up for the dogs. It will drive off any small bird which may attempt to share with it either that, or anything which has been laid out to feed the birds in winter. It is very amusing to watch its manœuvres should one hang out a tallow candle near a window. It is particularly fond of peas and maize, but the kernels of nuts, and the stones of the yew-berry, and acorns, as well as insects, of which it is constantly in search, form its favourite food.

PARIDÆ.

GREAT TITMOUSE.

Parus major.

THIS species is very common in all the wooded parts of the county. It is resident, and may be found in most of our gardens and shrubberies. It feeds largely on insects, and is also fond of flesh of any kind, as well as of various seeds, which, if of any size, it holds with its foot on a branch and picks to pieces, without fixing it in the manner of the Nuthatch. It is a powerful bird for its size, and will occasionally kill other birds, and having done so, generally, in the first place, picks out the brains*. It is particularly fond of the

* Perhaps only when in confinement.

seed of the sunflower, as well as of maize and oats, as are all the true *Paridæ* which are found in this country.

Its note in spring is very variable, at one time resembling the sharpening of a saw, while at another it may be expressed by the three words "Set your beans," with a stress on the first word. It builds sometimes in a hole in the ground or close to it, in a stub* of underwood, or a hole in a tree or wall. I have frequently seen it in the cistern of an unused pump, or in a flower-pot, in one of which, in a very open place, seven young birds were found perfectly dead from the heat of the sun. When building in such situations, it covers the whole of the base with a mass of hair, wool, worsted, &c. felted together, and generally forms the nest in one corner away from the centre.

BLUE TITMOUSE.

Parus cæruleus.

THE Blue Titmouse is the commonest of the genus, frequenting all parts, except the open heights, or the marshy levels. It is very familiar and very bold, though not particularly pugnacious. It will, however, hiss violently should a finger or stick be introduced into its nesting-place. If handled, it bites with such ferocity that, among the bird-nesting boys, it has obtained the elegant title of "Billy Biter." Its nest is placed in similar situations to that of the Great Titmouse. There has been more than one instance of its choosing a letter-box for this purpose. Mr. Booth mentions that a pair had for several years made use

* *Stub* signifies in Sussex an old stump, which has been often cut down, from which many new shoots have arisen.

of a hole in a lamp-post in Montpellier Road, Brighton, and, notwithstanding the constant traffic, brought off their young in safety.

It is largely represented when a number of small birds are making their excursions together through the woods in winter. In the spring it picks to pieces the green fruit-buds, and is hated by the gardener, though probably it does less damage than would have been done by the caterpillar of which it is in search.

COAL-TITMOUSE.

Parus ater.

THOUGH this species is by no means rare in the Weald, it is far less abundant than either of the preceding, and in my own garden I have not very often seen it, yet in July 1889 a nearly fully fledged young one was found dead in a box I had placed in a tree; and in the winter of the same year two of these birds were eating the seeds of an *Arbor vitæ* close to my dining-room window, and pecking at some bacon which I had hung up in it. I have seen it busily feeding on the seeds of the cornflower (*Centaurea cyanus*). It is very partial to fir-trees, and is certainly more common on the sand than on the clay. I have never met with it in the thickest parts of the forest, though I have occasionally seen it on the outer trees. In the neighbourhood of Chichester it is rather common, as also on the sands, and old fir-trees of Parham. The favourite place for its nest is in the deserted hole of a mole, or a mouse, at the foot of a tree; but it sometimes places it in a hole in the trunk of a tree at some distance from the ground. At Henfield, a pair brought

up their young in a box over a verandah some fifteen feet in height. Though insects are probably its principal food, I have never seen or heard of its doing any mischief by searching for them among fruit-buds. It feeds also on various berries. Its note is difficult to describe and varies considerably; it is shriller than that of the other Titmice. Moss, with short hair and wool, are felted together in the structure of its nest. I have also found rabbit's fur, and sometimes, but not always, quantities of feathers, whence, in common with the Long-tailed Tit, it is often called the Featherpoke. It is, however, more generally known as the Ground Tit. Mr. Jeffery mentions a nest at the bottom of a post nearly two feet below the surface.

MARSH-TITMOUSE.

Parus palustris.

Why this species has been thus named I cannot tell, as it does not by any means, if at all, affect marshy places; and although it is somewhat partial to the willow when in catkin, and therefore attracting numerous insects, I find that it frequents those species of *Salix* which grow on land which is high and dry, quite as much as those by the river-side. On the high ground in my own neighbourhood it is far commoner than the Coal-Titmouse, and nearly as often met with as its blue relative. Its food is the same as that of the preceding species; and it is very tame, as I can state from my own observation, having often watched it picking up pieces of oat, or a grain of maize, within a few feet of me. It is not so usual a tenant of my boxes as the Great and the Blue Titmouse, nesting among the thick stems of the under-

wood close to the ground, or in holes in stumps but little above it, in which it places a neatly built nest on chips of wood, composed of hair and fur, and generally lined with down of the willow, or the catkin of the balsam poplar.

It has a lively note in the spring, but its commonest call is well expressed in Yarrell's 'British Birds' (vol. i. p. 496) by the syllables "peh ! peh !" quickly repeated.

LONG-TAILED TITMOUSE.

Acredula caudata.

FREQUENTING principally the woods, copses, and rough hedgerows in the enclosed portions of the county, this species is not uncommonly met with, though it does not often visit our shrubberies and gardens, except in the breeding-season. During the rest of the year it roams about in little parties of ten or a dozen, flitting through the underwoods, and perching on them, in every possible position, as often as not head downwards, and uttering a constant chirping note as if to keep the little band together, meantime progressing steadily through the woods and copses, searching for insects, which seem to be its only food.

Its well known and very remarkable nest is generally placed in a thick bush, and is composed externally of lichens firmly woven into a compact mass with spiders' webs, most artfully blended with the colour of its surroundings, and lined with a great profusion of feathers. It is, however, not unfrequently built at the divarication of two nearly parallel lichen-covered stems of a tree, and sometimes as high as twenty or thirty feet from the ground, and so concealed that it is hardly likely to be discovered unless the

bird betrays it on returning to or leaving the nest. It occasionally lays as many as fifteen or even twenty eggs.

The male and female both roost in the nest. Its little parties generally keep to themselves through the summer, but in winter it often associates with the other insect-feeding birds.

PANURIDÆ.

BEARDED 'TITMOUSE.

Panurus biarmicus.

THIS species is entirely confined to reedy and marshy places. In his 'Ornithological Dictionary,' published in 1802, Montagu writes that he had met with a party of five, doubtless a brood of the year, near Winchelsea, among the reeds close to the sea-shore. One of them, which he procured, was in its nestling feathers, but though he took pains to find the nest he was unsuccessful. I have received it from Amberley; and in September 1844 I saw two females which, as well as several others of both sexes, had been shot there, and it has since been found breeding there. It is, however, much less common than it formerly was, in consequence of the very large tract of marsh, known as the Wildbrook, having been drained. It also bred in some reedy ditches near Lancing until disturbed by the railway.

Mr. Knox mentions a pair obtained near Amberley, and another pair at Fishbourne, near Chichester, but gives no date. Mr. Jeffery states that it is not now to be found there, the reeds being also gone.

AMPELIDÆ.

WAXWING.

Ampelis garrulus.

A RARE visitant, chiefly in severe winters. On January 12th, 1850, a beautiful male was shot in West Grinstead Park, and brought to Sir W. W. Burrell; another was shot in a brickfield near Horsham, apparently a female or immature bird. I have one in my own collection which was shot near Hastings.

Mr. Dennis, writing to me on July 4th, 1850, mentions that one was seen at Denton during last January, feeding on the berries of a *Pyracanthus* roughly trained against a house, and that he was informed that one had been shot near Newhaven, while feeding on a similar shrub in a cottage garden; that he saw one at Lewes, which was killed at Tarring Neville, and two more obtained near Hailsham. I have also seen two which were shot in Ashburnham Park, and one at Albourne; all three in 1844.

Mr. Knox mentions two which were shot in a garden at Newtimber, feeding on hawthorn berries, that one was killed at Beeding, and another near Shoreham. In the 'Zoologist' (p. 2768) a specimen, shot at Piddinghoe, is recorded by Mr. Ellman. There appears to have been a considerable incursion of these birds throughout England in that year, 1850 (*op. cit.* p. 6605).

Both nest and eggs were wholly unknown, until, in June 1856, they were discovered by one Ludwig Matthias Knoblock, Mr. Wolley's most trusted follower, at Sadio, on the Kittila River, in Kemi Lapmark (see Yarrell's 'British Birds,' vol. i. p. 529).

MOTACILLIDÆ.**PIED WAGTAIL.***Motacilla lugubris.*

ENORMOUS numbers of this species make their appearance on the coast throughout the whole of March, and smaller parties continue to arrive till the middle of April. In March I have seen the beach, between Brighton and Shoreham, covered with them in the early mornings, though a few hours after, very few, or none, will be met with, as they proceed at once to their inland quarters, where they become common throughout the county, and form one of the most sprightly and elegant ornaments of our lawns, gardens, and fields, where the new arrivals are readily distinguished from those which have remained with us during the winter, by the purity and brightness of their plumage. This Wagtail, soon after dispersing through the county, begins to build its nest, choosing some place in the neighbourhood of buildings, such as the thatch of a haystack, a hole in an ornamental stump in a garden, or in a wall or bank, or perhaps placing it on the larger ends of sticks in a fagot-stack, and constructs it of moss and fine roots, lining it with hair.

After it has reared its young, it betakes itself with them to the meadows, especially delighting in those which have been recently flooded, where no doubt it finds abundance of its insect food and small freshwater mollusks. In such places, I think I may say that I have seen them in hundreds, and at this period the young have the part of the forehead and cheeks which, in mature specimens, is white, of a delicate lemon-yellow. All the Wagtails either walk or run, and do not hop.

In August and September its numbers on the coast greatly increase by the arrival of flocks, while by the end of October the greater part of them have crossed the sea. The birds which remain during the winter flock together, often following the plough, or seeking their food in the sheep-fold, especially where the turnips have been half eaten and left in the ground, probably finding in their substance the larvæ of some insect or other. The flight of this bird is very undulating, and it keeps up a constant dissyllabic note, whether alone or in companies, while on the wing. It is commonly known in Sussex by the name of "Dishwasher."

WHITE WAGTAIL.

Motacilla alba.

THIS species occurs on the coast as regularly as the Pied Wagtail, but I can find no earlier mention of it in Sussex, than a note of my own ('Zoologist,' p. 3908) for April 21st, 1853, on which day I carefully examined five specimens, four of which, one being a female, had been shot between Shoreham and Worthing, and the fifth at Hove, all in the possession of Mr. Swaysland, of Brighton. The female contained eggs not larger than a pin's head. I exhibited these birds at the Anniversary Meeting of the Linnean Society, May 24th, 1853. April 6th, 1854, a male and female were shot at Hove, near Brighton, close to some ploughed land, though they are said not to follow the plough like *M. lugubris*, which led the editor of Yarrell's 'British Birds' (vol. i. p. 550) to suggest that the food of this species may be different. Mr. Swaysland informed me that they were wilder, and had a hoarser note. The male had a singular malformation, there being on one foot two perfectly formed hind toes.

On the 8th of the same month Mr. Pratt brought me a female, and on examination we found that the eggs were only just formed, whereas in *M. lugubris* they were larger than peas, so that it is probably a late breeder.

On further knowledge of this species, I conclude that it is seldom or never found on the north side of the Downs, though it frequents the coast from east to west. In its general habits, as far as known, it seems to resemble the common Pied species. I am not aware that it has ever nested in the county. Mr. Booth remarks, in his 'Rough Notes,' vol. i. :—"I have never met with the White Wag-tail during the winter, and, according to my own observations, those that visit the British Islands in the spring are considerably later in making their appearance on our shores than the Pied Wagtails that pass the winter on the continent. I cannot record a single instance where this species has been observed before the second week in April. During fine weather at that period these birds may commonly be noticed in Sussex, within a short distance of the sea-coast. As a rule they appear to be making their way from West to East, and seldom remain in the locality for any length of time. I have watched them seeking for food along the banks round brackish pools, as well as on the muds of Shoreham harbour. A few were also occasionally remarked frequenting the salt-marshes between Lancing and Worthing. Further east I found a single specimen feeding along the muddy shores of a dyke in the level near St. Leonards-on-Sea, in the first week in May. When disturbed the bird took a short flight, but after alighting two or three times on the floating weed and searching closely over the surface, it rose in the air and made a straight course along the shore towards the east. The water in the dyke was partly salt, and the tangled weed that grew in profusion contained a number of minute shells."

GREY WAGTAIL.

Motacilla sulphurea.

THIS is an autumn and winter visitant to this county, disappearing about the middle of March, very few remaining to breed, the greater number leaving in April, when it is assuming its breeding-plumage, and passing to the north or west, returning late in August or early in September, generally in little family parties, when the main body cross the sea, though a few remain during the winter. From its partiality to rapid, clear, and rocky streams, Sussex is little adapted to its habits. It delights in wild secluded spots, and never frequents ploughed or grass lands unless they are water-meadows.

As it cannot be called a common bird, I think it worth while to mention the few specimens which have fallen under my own observation. The first notice I have is, that from the 11th of November, 1840, one frequented my father's garden at Henfield for a few days, running about the lawn in pursuit of insects, jumping up at them and taking them on the wing, in the manner of the Pied Wagtail. On the 8th of May, 1841, I saw two which had been shot near Firle in nearly full summer plumage, and two others obtained in the same neighbourhood about the same time. In March 1844 one appeared for a few days, at a spring in a tanyard at Henfield. On the 10th of March in the same year I saw, at a birdstuffer's at Lewes, two more which had been shot on the level near that town, also in the same plumage. In May 1845, I observed a male in full breeding-dress, at a little runlet of water by the roadside at Ashington. On two or three occasions a single bird has appeared at my own house at Cowfold, running about on a flat-roofed verandah, and

jumping at the flies crawling on the inner side of the window panes. The note is rather loud and harsh, but cheerful.

The Grey Wagtail generally places its nest in a hole in the bank of a rocky stream, or a wall, or perhaps in a heap of stones, and it is very similar to that of the Pied Wagtail.

Mr. Booth, in his 'Rough Notes,' remarks that in the autumn, winter, and early spring a few remain in the neighbourhood of Brighton, resorting to open drains or pools, and in some instances visiting the gardens adjoining the town. Mr. Jeffery, in his P. N., states that he found a nest on the 1st of June, 1867, with the young nearly ready to fly, at Burton, near Petworth.

BLUE-HEADED WAGTAIL.

Motacilla flava.

This species is a spring visitant, and by no means abundant. In my own collection I have a female shot by Mr. Ellman, May 5th, 1851, between Eastbourne and Pevensey, and a male, shot at Hove, April 18th, 1866, as well as a female obtained about the same time near Eastbourne. In 1859 I saw, at Mr. Pratt's, two male specimens which had been shot on the 25th and 27th of April respectively at Hove.

The Blue-headed Wagtail is said to nest on the ground in corn-fields and meadows. Mr. Booth says that the bird may be met with every spring, along the coast of Sussex; that he is well acquainted with certain spots about a mile from the sea-coast, between Brighton and Shoreham, where a pair or two may be found at almost any time during May; and that he has little doubt that it breeds not uncommonly within a few miles of Brighton. He observes that he has

frequently noticed males in the vicinity of two or three of the sheep-ponds scattered over the Downs, at seasons when it was most probable that the female was sitting close at hand, and he figures a male and female obtained near Brighton in April 1874. In the 'Zoologist' (p. 6606) Mr. Wilson mentions a beautiful male taken near Worthing in April 1855; and a fine adult male shot near Brighton, by Mr. Pratt, is recorded (p. 7709) under date April 1861, while another (p. 263, s. s.) is noted, caught in a net in April 1871, and taken to him. Again, in April 1888 one was taken alive on the Downs (vol. for 1888, p. 226).

YELLOW WAGTAIL.

Motacilla raii.

THIS Wagtail, like the last species, arrives on our coast in April, and though a few breed with us, the main body, after remaining a very short time, leave the county for that purpose, and reappear late in July or early in August.

In a record of my own, from 1840 to 1876, and in another, kindly lent me by Mr. Jeffery, from 1860 to 1888, the earliest notice of its appearance is April 7th, and the first mention of its return is July 6th. It then remains with us till September, during which month it leaves this country altogether for the winter. On its first arrival it spreads over the ploughed land and meadows, sometimes in considerable flocks, but it is rarely seen more than a few miles from the coast.

It is partial to the sheep-folds on the Downs, and accompanies cattle in the fields, for the sake of the insects they disturb while feeding on the grass.

The nest may occasionally be found by the side of a ditch, or in a tuft of rushes on the levels, but more frequently in the corn-fields, where it places it in an open furrow, or any little depression in the ground, and the few I have seen have been constructed of dead grass and small roots. It is stated, however, in Yarrell's 'British Birds' (vol. i. p. 565) that Mr. Hewitson mentions a nest composed of green moss and grass, lined with rabbits' fur. In the autumn, it greatly frequents the open grass-fields. I have, at this season, often seen, in the Henfield levels, very large flocks of mingled old and young, busily engaged in picking up their food in the large drifts of débris left on the subsidence of a flood. I have found in their interior considerable quantities of small freshwater and land shells, of which such a locality affords a large supply. I have no recollection of ever having heard this Wagtail sing, but, respecting its note, it is stated in Yarrell's 'British Birds' (vol. i. p. 566):—"The call of this bird is more shrill than that of the Pied Wagtail, but less so than that of the Grey species, and consists of two notes repeated in succession, the second of which, in its musical scale, is a whole note lower than the first. The song of the cock is lively, but short, and not often uttered."

The earliest plumage of this bird is totally different from that of the adult, and is admirably represented by Mr. Booth in his 'Rough Notes.'

In Sussex it is generally known as the "Barley-Bird," probably because it arrives about the time of the spring sowing of that grain.

TREE-PIBIT.

Anthus trivialis.

This species visits us regularly early in April, many staying to breed with us, though still larger numbers pass on into other counties, reappearing in little parties in August, and departing for the continent in September. It spreads itself in pairs over the wooded and enclosed districts where there are trees.

Its song is strong, lively, and well sustained, and is mostly uttered while rising from the highest point of a bush or tree some thirty or forty feet in the air; after hovering for a few moments it continues to sing as it descends with quivering wings and outspread tail to the spot from which it had originally started. Though most authors state that it breeds on the ground, by far the greater number of the many nests I have known have been placed in thick bushes, generally brambles, some three or four feet from it. The nest is composed of green moss and dead grass, and lined with hair.

Its eggs vary in colour to a very remarkable extent, some being very similar to those of the Blackcap, others of a dark purple with still darker veins and streaks, and I have more than once found them of a plain blood-red unmixed with streaks, spots, or blotches. It is very seldom seen on the ground, and I am not aware of any country name for it, but the bird-fanciers call it the "Singing Titlark."

MEADOW-PIPIT.

Anthus pratensis.

THE Meadow-Pipit remains with us all the year round, though great additions arrive in April, and it may then be met with in all unenclosed parts of the county, frequenting as well the Downs, the dry open heaths and commons, as the marshy meadows of the levels bordering our rivers. After spreading through the country in suitable spots, generally in pairs, it reappears in large flocks on the coast in August, and by the end of September most of them have departed for the winter. It builds on the ground, sometimes among the corn, a foot or two within the edge of a corn-field, in a furrow, or any little depression on the surface, often on the open down or common, placing it under the shelter of a tuft of grass or other herbage. The nest is composed of coarse and fine grass, lined with hair and fibrous roots. The Cuckoo is very partial to it for the nursery of its tyrannical bantling. It is generally known as the Titlark. A very long and interesting account of the migration of the Meadow-Pipit may be found in Mr. Booth's 'Rough Notes.'

There is a very small variety of the Meadow-Pipit, if indeed it be not another species, found in various places in the county. I have myself particularly observed it on the extensive tract of old sea-beach between the harbour and the sea at Shoreham, and from that very place a clutch of four eggs, on which the bird was sitting, though they were not incubated, was taken by Mr. Gorham, the Rector of Shipley, on May 17th, 1880. Three of these he kindly gave to me; they were all four similar in colour and size; the measurements of my three were $\frac{1.0}{16}$ by $\frac{9}{16}$ of an inch. Now the average

dimensions of a dozen of the ordinary Meadow-Pipits' are $\frac{1.4}{1.6}$ by $\frac{1.0}{1.6}$. I never remember finding a whole clutch of the eggs of any other bird in which *all* were of an abnormal size.

I went to the spot a few days after to see what were the materials of the nest, but it had been pulled out and blown away by the wind. If it be *dwarf*, it is the only wild bird I have ever met with in that state.

In the 'Zoologist,' p. 1561 (s. s.) is the following notice by Mr. Wonfor:—"A very minute specimen, in perfect plumage, was obtained on November 9th near Cliftonville, Brighton, and was taken to Swaysland. From its size and general appearance, thinking it a new species, he sent it to Mr. Sclater, who pronounced it a dwarf. It measures five inches and one eighth from beak to tail."

The ordinary note of the Meadow-Pipit is "Tit, tit, tit," uttered while flitting from place to place. During the breeding season it has a pleasant song, low and soft, which it utters on the wing, rising some thirty feet in the air, and descending, with quivering wings and tail fully spread, to the ground.

RED-THROATED PIPIT.

Anthus cervinus.

THIS beautiful species, which had, for a long while, been confounded with the preceding, was included as a "British Bird" by Mr. Harting and Mr. Gould on evidence that to many ornithologists seemed inconclusive, though they fully admitted that it was one which, sooner or later, was likely to appear in Britain. The first example about which no doubt could exist was brought to Mr. Swaysland, of Brighton, on March 13th, 1884, and on the next day was seen in the flesh

by Mr. J. H. Gurney, Jun., who recorded the fact in the 'Zoologist' of that year (p. 192). The specimen was afterwards submitted to Mr. R. B. Sharpe, who exhibited it at the meeting of the Zoological Society of London on April 1st (Proc. Zool. Soc. 1881, p. 206). It was caught near Brighton, and is now in the collection of Mr. Monk, of Lewes.

A long account of the habits of this species, as observed on the shores of the Varanger Fjord in North-eastern Norway, by the late Mr. Wolley and Professor Newton, in the summer of 1855, will be found in Bree's 'Birds of Europe,' whence it has been reproduced in Mr. Dresser's well-known work. This species breeds in a somewhat restricted area in the extreme North of Europe, and thence to the eastward across Asia. In winter it is found on the shores of the Mediterranean, and especially in Egypt. The nest, which is placed on the ground among coarse herbage, is described as being simply built of dry bents without any lining of feathers or hair.

WATER-PIBIT.

Anthus spipoletta.

THE first notice of this species being taken in Sussex is that of Mr. John Pratt, of Brighton, who, in the 'Zoologist' (pp. 9279-80), states that in 1864 an example had been killed near Worthing, and another on the beach at Brighton, and that these two specimens were determined by Mr. Gould to be *Anthus spipoletta* of continental authors. They are also recorded in the 'Ibis' for 1865 (p. 114). That obtained at Brighton passed into the collection of the late Bishop Wilberforce, and Mr. Boynton, of Ulrome Grange, in Yorkshire, purchased the other, and submitted it to the inspection of

Professor Newton. I have a specimen in my own collection which was obtained in August 1868, and another in March 1869, both shot at Shoreham.

The most prominent distinction between this and the Rock-Pipit is that the outer tail-feather has the outer web and the distal part of the inner web on each side *white*, as is also the chin. All those which have been met with have occurred in early spring, and been found around the little pools which have been left by the tide. Mr. Rowley states "that all have taken their departure by the first week in April, and that they return again in August," which rather tends to the conclusion that they retire inland to breed. I have, however, never heard of the nest being met with in England.

ROCK-PIPIT.

Anthus obscurus.

THE Rock-Pipit is a permanent resident, though it receives a great addition to its numbers in the spring. It is for the greater part of the year entirely confined to the coast, and especially to the rocky parts of it, where it may constantly be seen flitting from rock to rock, or searching for small crustaceans and insects among the seaweed on the beach, and occasionally wading in the shallow water. It may, however, be frequently met with on the muddy flats and shores. In the breeding season the call-note and song are very like those of the Meadow-Pipit, but somewhat harsher. At that time of the year it sings on the wing and with similar actions, and is confined to the cliffs, where it builds in the crevices or little hollows between the rocks or behind a tuft of the sea-pink or other herbage, constructing its nest of dry grass and seaweed, with which it is generally lined, with the addition

perhaps of a little hair. I once found a very singular nest of this bird near Eastbourne. It was entirely composed externally of fine seaweed mixed with the dried egg-capsules of the common whelk, and lined with hair. Mr. Jeffery states (*Zoologist*, p. 1034) that he shot two Rock-Pipits on a small island in Chichester Harbour, and was surprised to find in the stomach of both bones and other remnants of small fishes. It often happens that small gobies and other fish are left by the receding tide to die and dry up, and in this case they would become an easy prey to the Pipits, otherwise it is difficult to imagine in what way their capture could be effected by these small birds. In addition to these fishy remains were small seeds of several kinds.

Mr. Booth states, in his 'Rough Notes,' that he has occasionally observed a few of these Pipits along the flat portions of the Sussex coast from Pagham to Brighton. The muddy pools of brackish water inside of the shingle banks are their favourite haunts. The chalk cliffs between Brighton and Eastbourne, and the neighbourhood of Fairlight and Hastings, are resorted to during the breeding season. Pevensey and Winchelsea levels are visited about the same time, and those of the flat districts to the west of Brighton, where they feed only by those pools which are impregnated with salt. The ten specimens mentioned in the '*Zoologist*,' p. 792, s. s., as having been taken near Brighton between the 16th and 20th of March, 1869, and at first mistaken for *Anthus spipoletta*, proved, on further investigation, to be the Scandinavian form of the Rock-Pipit.

TAWNY PIPIT.

Anthus campestris.

THIS Pipit was first noticed as British by Mr. Rowley, and is a rare straggler to this county, where, curiously enough, almost all the recorded specimens have been met with in the neighbourhood of Brighton. The first was taken at Shoreham Harbour on the 15th of August, 1858, and was in the collection of the late Mr. Collins, of Aldmouth, until 1862, when another Pipit having been shot at Rottingdean on the 24th of September, Mr. Rowley, on careful examination of it in the flesh, discovered that both this and the former were *Anthus campestris*, and records them in the 'Ibis' for 1863. I have in my own collection three specimens, all taken near Brighton. Mr. J. H. Gurney, Jun., tells me that his father had one which was shot at Rottingdean October 3rd, 1886, in very immature plumage.

Referring to the 'Zoologist,' we find (p. 9327) a male taken in a clap-net near Brighton, September 30th, 1864, which was seen alive by Mr. Rowley, and passed into the collection of Mr. Monk. At p. 1918, s. s., two more are mentioned by Mr. Woufor as shot at Rottingdean, September 6th, 1869. Another immature bird is mentioned by Mr. Rowley, obtained near Rottingdean September 29th, 1870 (p. 2383), also in the possession of Mr. Monk. And in October 1873 again another male example was killed near Brighton (p. 3832), which was purchased by Sir John Crewe. At p. 4456, s. s., Mr. Clark Kennedy mentions that one was caught in a clap-net at Eastbourne, November 8th, 1874; and at p. 4694, s. s., Mr. Swaysland records the purchase of a young male, taken in the same way, at the east end of Brighton. At p. 299, volume for 1877, Mr. Bond states

that he had a Tawny Pipit which had been taken in October 1875, a young bird, as shown by the lightness of its feathers. According to p. 312, s. s., 1877, another immature specimen was shot at Brighton on the 29th of September, and taken to Mr. Pratt. Three were caught on the Downs north-east of Brighton, in October 1886 (p. 490)*. On August 25th, 1887, a male was taken in a net close to the Ditchling Road, Brighton (p. 492).

As to its habits as a Sussex bird, nothing has been recorded. According to authors they are, on the continent, much the same as those of the other Pipits, as is also the manner of its nesting, but it shows a preference for dry and especially sandy places.

RICHARD'S PIPIT.

Anthus richardi.

An irregular spring and autumn visitant to the coast and neighbouring Downs, almost all those which have occurred having been taken near Brighton.

I have in my own collection one in summer plumage, taken on March 17th, 1869, on Clayton Hill, and two others also obtained near Brighton, but I cannot now give the dates.

The earliest mention of its appearance in the county is that of Mr. Rowley, who recorded it in the 'Zoologist,' p. 9166, and says that he received a living specimen from Mr. Swainsland on January 20th, 1865. It had been taken in a clap-net at a place called Toad's Hole, on the Downs, near Hangleton, Portslade, about $1\frac{1}{2}$ mile from the sea. The

* One of these was probably Mr. Gurney's specimen.

man who caught it said that he was struck by its loud note, and drove it about nearly two days before he could get it into the net, in which there was nothing to attract it. In 1867 Mr. Monk obtained a specimen, taken near Brighton, October 9th (Zoologist, p. 1017); and in the volume for 1868 (p. 1478, s. s.) Mr. Rowley states that one was taken near Brighton October 5th, and that it was moulting all over, the tail being only half-grown, and remarks that it was very late, all the other Pipits moulting in August.

Mr. Wonfor, in the 'Zoologist' for 1869 (p. 1513, s.s.), states that four specimens had been shot within the last month (November), and in 1870, at p. 1984 of the same journal, Mr. Bond, giving a list of rare birds he had seen at Mr. Pratt's, states thus:—"I have seen in all eleven specimens of the Richard's Pipit, the first taken in the first week in September, and the last on the 6th of December of the present year."

ALAUDIDÆ,

SHORE-LARK.

Otocorys alpestris.

SINCE the first British specimen obtained at Sherringham, in Norfolk, in 1830, the Shore-Lark has been found, sometimes in large flocks, on various parts of the coast, extending as far westward as Weymouth, where, about the 20th of November 1869, I saw eleven in the flesh, which had been shot on Lodswell Marsh, of which seven were females. The notices of the occurrences of this bird in Sussex are not, however, very numerous. I have a specimen in my own collection, killed in March 1870, at Rottingdean. In Yar-

rell's 'British Birds' (vol. i. p. 606) it is stated that three out of a flock of five were captured alive near Brighton in November 1861. Mr. Booth, in his 'Rough Notes,' makes the following remarks:—"During severe weather in Sussex, I often remarked a fresh-captured bird or two of this species in the store cages of the professional bird-catchers, when meeting with them along the Downs near the coast. But one small flock of three or four individuals has (with the exception of the above-mentioned captives) come under my notice in this county; these birds were on the shingle-banks, between Shoreham and Lancing." The following occurrences are taken from the 'Zoologist':—On March the 1st 1870, "a fine specimen of the Shore-Lark was taken, at night, in a lark-net, on the Hodden Farm, near Newhaven.—T. S. Monk" (p. 2140). Mr. Rowley remarks (p. 2107) that two specimens were obtained near Brighton on the 2nd of November, 1870. Mr. Aplin states (p. 350), 1885—"In April last I received a male Shore-Lark, in the flesh, which was shot on the 22nd on the coast, near Hastings. Its stomach contained numerous small white worms, and a small colcopterous larva, also a quantity of grit." The Shore-Lark frequents the beach, and the neighbouring stubbles, or the open bushy lands near the sea, in little flocks. Its manners and flight much resemble those of the Sky-Lark. It has never been known to breed in this country, nor nearer than the high mountain-pastures of Scandinavia, whence no doubt come the birds which visit us in winter. But it is also common in many parts of America, and I have eggs from Labrador.

SKY-LARK.

Alauda arvensis.

THIS, by pre-eminence *the* Lark, is generally diffused over the open country, but avoids the woods. It is a resident, but, except in the breeding season, very much on the move, and often gathers in enormous flocks, especially in hard winter, when it migrates from place to place, according to the weather. Its line of migration is most frequently from East to West. Immense multitudes cross the sea, and numbers are frequently found to strike the lanterns of the lighthouses. I have often seen them in the neighbourhood of the coast passing over, and flying very swiftly for hours together.

The delightful song has been the theme of the poets of all ages, and is far more cheerful from the celestial height, than that of the equally celebrated Nightingale from its legendary thorn. It feeds on seeds of weeds and the corn which it finds scattered after harvest, as well as on insects, and in hard weather often frequents the sheep-folds, probably finding larvæ among the decaying roots of the turnips. It is found still more abundantly on the open stubbles, where it roosts, when many hundreds, I may say thousands, are taken in nets, and sold to the poulterers. Enormous numbers are annually taken by the call-bird and clap-net, besides those that are shot as they hover—an easy mark for the gun—over an instrument of wood, into which are fixed bits of looking-glass, and, by a string properly adjusted, made to spin round rapidly, this device proving a never-failing and fatal attraction to the birds.

The nest is generally placed on the ground in an open meadow, or corn-field, in any slight depression, and very commonly in a round hole in the turf, formed by the bird itself, and is composed of grass, and lined with fine roots

and hair. It is said to remove its young, or its eggs, if disturbed. Mr. Blyth (Nat. 1837, p. 102) describes a case of which he was told, wherein the upper part of a Sky-Lark's nest had been shaved off by the scythe, and the surrounding grass levelled by the mowers, without the female, which was sitting on her young, flying away. She was found about an hour afterwards to have constructed a dome of dry grass over the nest during the interval. The eggs are not subject to much variation, but a few years ago I found a nest in the vicarage meadow at Cowfold, in which all the five eggs were pure white, and perfectly fresh and good.

Although I have not hitherto made any remarks on varieties, I may say that in February 1890, I was shown by Mr. Pratt, of Brighton, a Sky-Lark in such remarkable plumage that I think it is worthy of mention. The whole of the head and the upper part of the body are black, with the edges of the feathers almost imperceptibly tinged with brown. The under parts of the body, and the axillary plumes, the scapulars, and about half an inch of the secondaries, as also the tips of the primaries, and the final half of the tail, are black. The middle of the secondaries, forming a distinct bar across the wings, and about half the primaries, are white, the latter being slightly pencilled with black on the upper surface, while on the under side they are pure white. This specimen was originally, when first caged, an ordinary Sky-Lark, and assumed this plumage.

WOOD-LARK.

Alauda arborea.

THE Wood-Lark is a resident, but very local, and by no means common. When it occurs at all it is on the edges

of those woods which are well furnished with timber, being seldom or never found far from the outside. It is a beautiful songster, and utters its delightfully liquid, flute-like notes in the evenings of spring, summer, and autumn, generally while suspended in the air at a very considerable height, and sometimes continuing it intermittently for an hour together. Some time ago, this bird might be heard from my lawn at Cowfold every fairly warm evening, trilling its lovely notes, often far into the night; but I have not heard it for many years, nor met with it, in my own neighbourhood. In fact, the last time I saw it at all in Sussex was when shooting in the parish of Cowfold in January 1881. I was surprised to find it in little flocks of twenty or thirty, in the stubble-fields, just before a heavy snow, which covered the ground deeply for many days. They seem to have migrated in a body, and I have never seen or heard of one in the neighbourhood since. At this time they assembled together all along the coast, wherever the ground was free from snow, and many dozens fell victims to the bird-catchers. Except on such occasions, they are found in pairs, and never in large numbers in any one district. It chooses a grassy spot, on the outside of a wood or copse, for its nest, constructing it of dry grass, mixed with a little moss, and lining it also with fine grass, without hair or feathers. Although it takes a few small seeds, insects form its principal food, and it is very partial to grasshoppers.

CRESTED LARK.

Alauda cristata.

ALTHOUGH this species is not uncommon in Normandy and in some parts of Holland, its occurrences in England have

been few and far between. Its first appearance in Sussex is that of an example in the late Mr. Bond's collection, which was procured at Littlehampton, and from which the figure in Yarrell's 'British Birds' was taken; it is now in the possession of Mr. Whitaker, of Rainworth Lodge, Notts. Another was procured near Shoreham, by a bird-catcher, on the 20th of October, 1863, and seen alive the same day by Mr. Rowley, as is recorded in the 'Ibis,' 1864, p. 224. This example is now in the collection of Mr. Monk. Besides these, I have in my own collection another specimen, which was captured by a bird-catcher at Portslade, near Brighton, October 10th, 1881, and taken to Mr. Pratt's shop in that town; this proved on dissection to be an adult male. I recorded it in the 'Zoologist,' p. 494, for 1881. It is a more familiar bird than the Sky-Lark, frequenting in its own country the roads, and even making its appearance among the houses of the villages, often perching on the walls. The cock has a soft and pleasant song, generally given on the wing, and the hen is said to sing also. The nest is generally placed in a hoof-print, or other depression in the ground, though sometimes on a bank or mud wall, or even on the edge of a low thatched shed (see Yarrell's B. B. vol. i. p. 633-4). It is easily distinguished from the Sky-Lark by the reddish-buff colour of the under surface of the wings.

SHORT-TOED LARK.

Alanda brachydactyla.

THIS species, like the last, is a very rare visitant to Britain. The first appearance in Sussex was that of one which had been taken in a lark-net near Brighton in September 1854. It

was for some time kept alive in Mr. Swaysland's possession (Zoologist, p. 4568). In April 1858 another was shot while dusting itself in the road, and is noticed in the 'Ibis' for 1859, p. 330. No other is recorded until November 1874, when a third was caught in a net, close to the same place, and brought alive to Mr. Swaysland, who sent it, still living, to Mr. Rowley. Of the habits of this bird I can say nothing from my own knowledge.

WHITE-WINGED LARK.

Melanocorypha sibirica.

THE only specimen which has been met with in England was exhibited by Mr. Rowley, at a meeting of the Zool. Soc. January 27th, 1870, and was taken in a net at Brighton. It was a hen bird*, and when captured was in the company of a flock of about two dozen Snow-Buntings. It is now in Mr. Monk's collection. Its habits are little known. It is found in Northern Europe, and in South Russia generally, and adjoining States. Pallas says that it frequents the roadsides, singing as it flies; that it does not rise often to any great height, though it warbles for a long time while hanging in the air, and that it builds its nest on the ground, forming it of grass.

* It was originally recorded in the 'Zoologist', p. 1934, s. s., as a young Snow-Finch (*Montifringilla nivalis*), a species not as yet known to have occurred in this country.

EMBERIZIDÆ.**SNOW-BUNTING.***Plectrophanes nivalis.*

THE SNOW-Bunting visits the county almost every winter, but is more abundant in very severe seasons. It arrives at irregular periods depending on the weather, and sometimes in very large flocks consisting of birds of both sexes and all ages, though more generally, of birds of the year; and often flying so closely together that many may be killed at a shot. It is not often met with at any distance inland, and is generally found on the beach, or on the flats which are uncovered except at the highest tides, and sometimes on the unploughed fields in the neighbourhood of the coast.

On the 18th of June 1839, I saw, in the flesh, at Mr. Swaysland's an adult male which had just been shot near Brighton. The nest has not yet been found in England, but has lately been obtained in Scotland; the first nest found *with eggs* was placed, according to Mr. John Young, in a "scree," or stream of loose stones detached by weather from the mountain-side. Hitherto there has been but a single record of this nest, which was exhibited to the Linnean Society, November 1st, 1888. The food of all the Buntings is principally seeds of some kind; this species is especially fond of those of *Suaeda maritima*, but on occasion will eat oats. At p. 792, s. s., of the 'Zoologist,' Mr. Dutton records a splendid pair shot at the "Wish Tower," Eastbourne, on April 14th, 1867, one of them being in full summer plumage,

that is, pure white head and breast and black back; and at p. 3912, s. s., Mr. Clark Kennedy mentions a specimen shot on the beach, at the same place, in July 1872, and that it was in full breeding-plumage.

LAPLAND BUNTING.

Plectrophanes lapponica.

THIS Bunting is somewhat rare in England, and the following are, I think, all that have been recorded as having occurred in Sussex. In Yarrell's 'British Birds' (vol. ii. p. 16) it is stated that one was caught on the Downs, near Brighton, in, or previous to, 1827*. On September 30th, 1844, an adult male was netted with some Larks, on the Downs near Brighton, and is now in my collection; it is in the plumage of summer, but is undergoing a slight change from the advance of the season.

In the 'Zoologist' (p. 2383, s. s.) mention is made, by Mr. Bond, of a young male, obtained near Brighton on October 6th, 1870; and another, also a young male, was caught in a net on the Downs, and purchased by Mr. Swaysland, in the first week of October 1875 (p. 4695, s. s.) Both these last were taken alive. In the volume for 1889, Mr. Brazenor, a bird-stuffer of Brighton, states that he received a male which was caught about a mile from the town, in February of that year, and on September 23rd a female, and on October 10th a male (see pp. 144 and 436); and in a letter received in June 1890

* This species was not recorded in England at all till 1826; in that year one was caught in Cambridgeshire and was kept for some months in a cage. See Trans. Linn Soc. xv. p. 156.

he tells me that four more were brought to him in November, and another in January, all taken in the neighbourhood.

According to Yarrell's B. B. vol ii., this bird is found in colonies in Lapland, where the cloudberry and the dwarf birch are the chief vegetation, and utters a song, which, though not brilliant, possesses a tone of sweetness. The nest is formed chiefly of dry grass and a bedding of soft feathers, which distinguishes it from that of any other species frequenting the district. It is generally a local bird, and does not assemble in large flocks; it feeds on berries and insects. In its fondness for swampy places it resembles the Reed-Bunting.

REED-BUNTING.

Emberiza schæniclus.

THE Reed-Bunting is found throughout the county wherever there are beds of reeds, either by the river-sides or in the marshes or ponds, and is resident throughout the year. It is particularly abundant in the patches of reeds between Shoreham and Beeding, where any evening many may be seen dropping in, one by one, from a considerable height in the air to their roosting-places.

In the winter they roam about with flocks of Sparrows and other small birds, feeding along with them about the corn-stacks and farm-yards.

In the breeding-season it utters a slight song, generally of a few notes, the last two or three being drawn out considerably, while the bird is sitting on a high reed, or little bush overhanging the water.

It builds among the reeds, constructing its nest of coarse

grass and moss, and lining it with finer grass and feathery tops of the reed and a little hair. In land which is liable to be flooded, it is often built on the tangled herbage which has been left on the willows, or other bushes, on the subsidence of the water. It is generally known in Sussex as the Reed-Sparrow.

RUSTIC BUNTING.

Emberiza rustica.

NOTICE of the only example which has occurred in England was communicated to the 'Ibis' for 1869 (p. 128), by Mr. Gould. It was caught near Brighton, October 23rd, 1867, and is now in the collection of Mr. Monk. It was shown to Mr. Rowley while still alive, and its portrait has been given by Mr. Gould in his 'Birds of Great Britain.'

Its proper home is in the north-east of Europe, and the most northern part of Siberia. In its habits it much resembles the Reed-Bunting. Of its nidification little appears to be known. (See Yarrell, B. B., vol. ii. p. 29.) According to Mr. Dresser ('Birds of Europe,' vol. iv. p. 233), the nest is made entirely of fine wiry grass, and is not very carefully built.

LITTLE BUNTING.

Emberiza pusilla.

THIS species, like the last, has only once occurred in Britain, this example having been taken near Brighton in a clap-net. It was exhibited by Mr. Gould, at a meeting of the Zoological Society of London, November 8th, 1864, and recorded in

their 'Proceedings' for that year, p. 377 (see also 'Ibis,' 1865, p. 113); this specimen passed into the collection of Mr. Monk. It inhabits, like the last, the northern parts of Europe and Siberia. It is found both in the older pine forests and underwood, building on the ground an artless nest of grass-stalks and larch leaves, and is said to feed on a species of beetle of the family *Tenebrionidæ*. (See Yarrell's B. B. vol. ii. pp. 34-36.)

BUNTING.

Emberiza miliaria.

THE Bunting is remarkably heavy and clumsy in its appearance and movements, suffering itself to be approached within a few yards, and then merely moving away to a very short distance, with a laboured flight, and with its feet hanging down.

It is a resident, frequenting principally the most open parts of the cultivated land near the coast, between the Downs and the sea. During the winter it assembles in large flocks, seeking its food, which mainly consists of grass and other seeds, in the stubbles, and occasionally about the corn-stacks, and it often assembles to roost among thick herbage above the ordinary high-water mark. In summer it spreads over the cultivated fields, particularly those of seed grasses. Among these it builds its nest, which is clumsily constructed of straw and dry grass, with fine blades of the latter, fibrous roots, and a little hair for the lining. At this time of the year, it may be seen perched by the road-sides, and uttering its harsh, single note from some bush or rail, and often from a large clod, whence it has obtained the local name of "Clod

Bird.” A few pairs may occasionally be found on the north side of the Downs, but it does not penetrate very far into the Weald. It is a very late breeder, its nest being often found with eggs by the mowers.

YELLOW BUNTING.

Emberiza citrinella.

THIS is the commonest, as well as the handsomest, of all the British Buntings, and may be found in almost every hedgerow in all parts of the county, uttering its well-known note of “a little bit of bread, and no cheese” in the spring, from the top of a tree or bush.

The nest is seldom far from the ground, built of moss, roots, and hair. Mr. Jeffery, in his private notes, mentions finding one composed entirely of roots. Like its congener, the Bunting, it breeds rather late. In the winter it flocks together with Chaffinches and other small birds, roving about the fields and farmyards. It is always called the “Yellow-hammer” in Sussex.

CIRL BUNTING.

Emberiza cirrus.

THIS is much more local than the last, but is found at intervals all along the coast, though only in rare instances in the Weald, and then not far north of the Downs. One was accidentally shot, in the parish of Cowfold, by a person, who fired at it as it was passing overhead, merely to

discharge his gun before coming indoors. This was a male bird. It is tolerably common in the neighbourhood of Brighton, and I have met with it occasionally, from Hastings in the east, to Bognor in the west.

The note, which merely requires of the passer by "a little bit of bread and no —," without any mention of the "cheese," is generally heard from a high leafy tree, which makes it difficult to get sight of the bird.

This species is particularly fond of the berries of the *Solanum dulcamara*. The nest is placed on, or near, the ground, sometimes in a quickset hedge or low bush, and has been found several times near Brighton, among ferns, on a rockery; and in such a situation I was shown one in the garden of Mr. Booth, on the Dyke road, on which the female was sitting at the time. The nest was very similar to that of the Yellow Bunting, and, like that species, this bird assembles in flocks in the winter, sometimes, according to Mr. Booth, as many as 50 or 60 being seen together.

ORTOLAN.

Emberiza hortulana.

Of the occurrences of this bird in Sussex there are not many, and it is a decidedly rare bird in England. It visits us occasionally in summer only. It is common in Holland and Flanders, and breeds there, forming a nest somewhat like that of the Sky-Lark; the note is said to be chirping and monotonous.

In the spring great numbers are, or used to be, imported into England from Rotterdam for the table, so that it is far

from improbable that some of those recorded as having been taken in this county are escaped birds.

On April 29th, 1841, a fine specimen, now in my collection, was shot on the viaduct of the Brighton railway, close to the town, and was recorded by me, Ann. Nat. Hist. vii. p. 524; and a male was shot between Lancing and Worthing, April 27th, 1852 (Zoologist, p. 3476). Mr. G. W. Stephenson, by whom it is recorded, mentions that when first observed, it was seeking food on the beach by the road-side. It was found to contain the remains of small beetles, principally a species of *Curculio*. One of these birds was caught with bird-line on the Dyke Road, Brighton, in 1870, and was in the dark brown plumage of the adult male in summer; this specimen passed into my own collection. About the 5th of May 1871, one was got at Brighton, according to Mr. J. H. Gurney, junr. (Zoologist, p. 2682, s.s.). A female was obtained near Brighton, in February 1877, which came into my possession.

BLACK-HEADED BUNTING.

Euspiza melanocephala.

THIS species was first recorded as British, by Mr. Gould, in a letter dated December 1st, 1868 (see 'Ibis' for 1869, p. 128), in these words:—"I have now to inform you of the occurrence of *Emberiza* (*Euspiza*) *melanocephala*, of which a very fine old female specimen in perfect plumage is now before me. It was brought me by Mr. Robert Brazenor, of 23 Lewes Road, Brighton, by whom it was shot about the 3rd of November last, near Mr. Ballard's windmill on Brighton Race-course, while, as he stated, 'it was following a flock of

Yellow-hammers.' His two sons were with him at the time. On examination of the bird, a number of eggs were found in the ovarium. This is all the information I was able to obtain respecting it." It has occurred once in Heligoland. Mr. Robson, of Ortakey, states that its habits are similar to those of the Common Bunting, sitting on the top of a bush, or low tree, and pouring forth its simple notes, or flying from one elevated part to another, with its legs hanging down. The nest is built not far from the ground in a rose bush, vine, or bramble. Dr. Lindermayer, in his work on the Birds of Greece, says :—"This Bunting arrives always in the last five days of April in Greece, appearing everywhere at once, so that the flats near the sea, which are covered with vines and other creepers, and the places where the olive-trees are scattered about, are alive with this lovely and melodious bird. It is peculiarly partial to vineyards. Its nest is always formed of dried straw, is carefully made, and is lined with horsehair. The bird leaves Greece in August."

FRINGILLIDÆ.

CHAFFINCH.

Fringilla cœlebs.

THIS bird is of such a sprightly disposition, and of such elegant plumage, that "to be as gay as a Chaffinch" has become quite an ordinary proverb. It is one of our commonest finches, and is found in all the wooded parts of the country, and in every garden, and its joyous note is one of the first indications of approaching spring. It has the

remarkable habit of *walking* along a horizontal bough, and may be often seen springing up from a high branch into the air and pursuing an insect, very much in the manner of a Flycatcher. It may be frequently seen on the road in search of food, and in the summer builds an extremely elegant nest, generally well matched in colour with surrounding objects, and composed of moss and wool, or any soft material, ornamenting the exterior with pieces of white lichen, or now and then a flake of birch bark, lining it neatly with hair and feathers. It is disliked by gardeners from its propensity to pick up the seeds from the radish-beds, and its eating the buds of the early vegetables when just springing from the ground. It is also very destructive to primroses and crocuses, compensating greatly, however, for these injuries, by destroying a vast number of leaf-rolling caterpillars, and insects which infest our apple and other fruit-trees, and by devouring great quantities of seeds of plants injurious to the farmer. It also feeds its young principally on insects and their larvæ.

In the winter it assembles in large flocks, often, but not always, of only one sex.

BRAMBLING.

Fringilla montifringilla.

THE Brambling is an autumn visitant, occasionally remaining late into the spring. It is most abundant in very severe winters, and is found, either singly, or in small parties, feeding round the corn-stacks, showing preference for oats. Another specially favourite food is beech-mast, for which it visits the plantations on the Downs and the Forest, occasionally in large flocks of both sexes together.

There was a very large arrival of this species all along the coast of Sussex, in January 1867, when the weather was very severe, and the fall of snow unusually deep. In the same month of 1871 there was an exceedingly violent storm, when the largest arrival of these birds occurred that I ever remember, and great numbers sought their food round the houses wherever it was charitably provided for birds in general, and the stubbles along the coast were literally covered with them, together with Linnets and other small birds.

On the 4th of February 1841, I shot three males and one female as they were feeding under an oat-stack, behind the Pad Inn, near old Shoreham Bridge, and three others were shot near the same place a few days before.

I have hitherto referred only to the coast; inland, the Brambling has often occurred, but not so plentifully. In January 1838, a male was shot in the garden at Barrow Hill, Henfield, while feeding on crumbs at the window; and in February 1841 two more males were shot in the same parish. In April 1843 a flock of about forty frequented the beech-trees in the parish of Lower Beeding, in St. Leonards forest, for some weeks, and on the 14th two males and two females, in full nuptial plumage, were sent to me. In October 1853, about a dozen were caught in a sparrow-net while roosting among the straw on the sheltered side of an oat-stack at Cowfold, two of which I received; about the same time several were obtained in the neighbourhood of Horsham.

TREE-SPARROW.

Passer montanus.

A SEVERE winter generally brings small parties to the coast and the Downs, accompanying the flocks of Bramblings, and searching, like them, for their food on the stubbles and about the stack-yards. They arrive in small flocks, some of them passing on from east to west, and returning again in the spring, when the greater number leave the county altogether, a very few pairs remaining to breed. A few years ago, I found a little colony nesting in holes in some pollard ash near the river Adur, in the parish of Henfield. It has occasionally been taken in the sparrow-nets, roosting in the corn-stacks; I have also received it from Eastbourne. In plumage the male and female differ very slightly. It generally chooses a hole in a tree for its nest, but it has several times made choice of apertures among the sticks under the Rooks' nests at Oakendean, near Cowfold.

With regard to its song, though some consider it harsh, my own opinion is that it is very pleasant, but a trifle Sparrow-like, and it is continued for some little time. 'The nest is composed of dead grass and feathers.

HOUSE-SPARROW.

Passer domesticus.

OF this bird I may say with Horace—

“Difficile est proprie communia dicere :”

it is as universally distributed over this county as it is over nearly all the rest of Great Britain, and I have little to

say of it, save that it is about equally destructive and beneficial to the interests of the agriculturist, for, though it appropriates to itself large quantities of grain, it also rids them of immense multitudes of injurious insects. It is a most familiar as well as impudent bird, of which I may give one remarkable instance. A lady at my own house at Cowfold, watched one of them coolly plucking the feathers from the back of a so-called Sicilian Dove (*Turtur risorius*), which was sitting on its nest in a somewhat bare *Arbor vite*, immediately under her bedroom-window. So many singular situations which the Sparrow has chosen for its nest have been described by others, that, although it has nothing to do with the Birds of Sussex, I cannot refrain from mentioning one, and this was in the mouth of Thorwaldsen's celebrated statue of the Lion, at Lucerne, greatly diminishing the dignity of the figure. The grimy appearance of the Sparrow of our towns, and the bright and sprightly aspect of those of the country, make them appear so distinct, that Mr. Booth has facetiously given in his 'Rough Notes' an admirably characteristic plate of each.

A Sparrow pudding is a favourite Sussex dish, and by no means to be despised. Many hundreds are annually taken in nets at night, and I have many times when a young man joined in the amusement of catching these birds.

HAWFINCH.

Coccothraustes vulgaris.

THE Hawfinch is resident, and is met with occasionally in all the wooded portions of the county, in early spring singly, and after the beginning of April, in pairs. By the middle of

that month, or in the first fortnight of May, they may be observed in little family parties, feeding on seeds in general. By the time the peas are well formed they enter our gardens, committing great havoc among them, and if undisturbed they would continue to do so till after they are ripe, and would finish them to the last pea. These birds are then very wild and difficult to get a shot at. They are especially fond of the seed of the maple. During the breeding season they are remarkably silent, and had I not from time to time picked up a stray feather or two of the bill-hook-shaped primaries, I should have had no idea that there were any in the neighbourhood. I have only myself met with two of the nests in Sussex, and both were in my own garden; they were roughly constructed of a rather large mass of dead twigs of the birch, lined with fine grass, wool, a little hair, and a few feathers. One was placed on a very leafy bough of an apple-tree, and the other in thick ivy, against the trunk of an oak, each about ten feet from the ground. In winter, a considerable flock may occasionally be met with. In December 1889, I observed a female breaking up the green seed-vessel of an *Arbor vitæ*, close to a window of my own house. They are remarkably fond of maize, which I have often seen them take from the side of a pond where it was thrown for some tame wildfowl, in my own grounds; and I have several times caught them, attracted by the same seed, at a chicken-house, which has a large run enclosed by iron wire, where, on my sudden appearance, they were too frightened to find the apertures by which they had entered, and, on one occasion, I was so severely bitten on the hand as to draw blood.

In January 1889, a female was seen close to the window at Barrow Hill, Henfield, for some days, and was afterwards joined by a male. They were observed feeding on the seeds of a rose-tree, close to the house. This bird does not eat the

flesh of fruit, but only the kernels of the stones, of which it swallows small pieces, for the purposes of trituration. Mr. Jeffery, in his p. n., remarks that "in February 1873, this species was plentiful in a cherry orchard near Chichester. Twelve were sent in one day to a bird-stuffer in that town." One met its death by flying against the lantern of the Bell Tout lighthouse, near Beachy Head, in December 1863 (Zoologist, p. 9043). Several were killed at Eastbourne.

GREENFINCH.

Coccothraustes chloris.

THIS species is very common, and resident throughout the county, frequenting our gardens and hedgerows, breeding in the shrubberies every spring, and, like the Chaffinch, doing considerable damage to the seeds sown, or coming up, in the kitchen garden. It nests in April, using green moss, wool, and fibrous roots, and, for the lining, finer roots, hair, and a few feathers. In winter it gathers on the stubbles and hedgerows in large flocks, more especially on those between the Downs and the sea, flying so close together that, in my boyhood, I several times killed as many as twenty at a shot.

It resorts, at this time of year, to the farm-buildings and stack-yards, as well as to the sea-beach and dry mud-flats, where it feeds on the seeds of the rough herbage, among which it roosts. The Greenfinch is often caught with other birds in the sparrow-nets, and is much used in the cruel "sport" of trap-shooting. Its monotonous call is heard early in the spring, but it does not sing till the nest is commenced, or finished, and then it continues to do so till after midsummer, often from the top of a high tree, occasionally

flying up, and describing a small semicircle, almost hovering in the air, and with wings stretched out and tail wide spread, descends to the place whence it came, or to the top of another tree close by.

SERIN.

Serinus hortulanus.

OF this, one of the smallest of our British *Fringillidæ*, but few specimens have occurred. As almost all which have yet been taken in this county have been caught near Brighton, and as it is not a very uncommon cage bird, it is not impossible that all may be escaped birds: it is, however, remarked in Yarrell's 'British Birds,' vol. ii., that most of the specimens have been captured in the spring, the most likely season for this species to reach England. Those I have seen have certainly borne no marks of having been in confinement. In my own collection I have a female caught near Brighton on April 1st, 1873. It has never bred in this country.

According to the editor of Yarrell's 'British Birds' (vol. ii. p. 114) its song is poor, and generally uttered from the top of some tree, and sometimes on the wing while flying up, in the manner of the Tree-Pipit.

Its nest is very neat and compact, built of fine roots and grass bents, neatly lined with feathers and horsehair, the outer portion interwoven with spiders' webs with a few bits of lichen and grey moss. On the Continent, it inhabits gardens and orchards, or the high poplars bordering many of the roads.

Mr. Bond (Zoologist, p. 7105) mentions that he was shown a specimen of this bird, which was caught in a clap-net near

Brighton, June 20th, 1859; it was then in the possession of Mr. Pratt, who had it shortly after its capture; it was described as being quite alone and very wild. Mr. Bond believed it to be a female. Mr. Monk (Zoologist, p. 229, s.s.) states that a beautiful example was caught on April 9th, 1866, at Hove; it was also taken in a clap-net, and was in fine summer plumage; it passed into his own collection. Again in the 'Zoologist,' p. 119, for 1884, Mr. Bond records a specimen of this bird taken near Brighton in April 1870. Another is mentioned by Mr. Chase, of Edgbaston, as having been obtained at Ovingdean, near Brighton, a male in perfect plumage showing no signs of captivity, January 27th, 1888 (Zoologist, p. 108, for 1888).

GOLDFINCH.

Carduelis elegans.

ALTHOUGH the Goldfinch was formerly very common in all the open parts of the county, it has, of late years, become comparatively rare. Its favourite fare, "the thistle's downy seed" or that of the common knapweed, of which it is exceedingly fond, are however still sufficiently abundant. It formerly bred every year, in my own garden, frequently choosing a horse-chestnut on the lawn, as also a Phillyrea, placing its nest between the diverging stems close to the trunk, and in a particularly thick apple-tree, near the end of a leafy branch, and, now and then, a lichen-covered pear, building it of wool, felted together with the aforesaid lichen, and lining it with the down of the seed of the balsam poplar, a very favourite material, when it can be obtained. The nest is very similar to that of the Chaffinch, but much smaller

and even neater. For its sprightly manners, its cheerful notes, and its extreme docility, it is greatly prized as a cage-bird, and is frequently supplied with a small bucket and chain, with which it is taught to draw up its water, or seed. In winter it receives considerable accessions, and though not in such large numbers as formerly, it is frequently captured in clap-nets, coming freely to the call-birds. Mr. Booth states that one Brighton bird-catcher informed him that about twenty-five years before the publication of his 'Rough Notes,' he had, at one pull of his net, taken eleven dozen. Mr. Hussey, in 1860 (*Zoologist*, p. 71-4), put the annual captures of this species near Worthing at about 1154 dozen, nearly all cocks; and Mr. Booth further states that even larger numbers used to be yearly taken within ten miles of Brighton, adding that in that neighbourhood it had now become comparatively scarce, owing in part to the fatal practice of catching the birds prior to, or during the breeding season; so that not a hundred may now be seen, even at the most favourable time of the year. Knowing this, no one can be surprised at the diminution of the species. The young are known to the bird-catchers as Greypates.

There is also a variety called the Cheveril, or the Chevil, which is distinguished by being somewhat larger than the ordinary form, by having the chin entirely white, and the white on the sides of the head extending upwards in a well-defined line across the occiput; the sides of the breast, which are usually brown, being also white. This form is uncommon and valuable, because it is believed to have a sweeter song, and to pair more freely with the Canary-bird.

SISKIN.

Carduelis spinus.

THE Siskin is an irregular autumn and winter visitant, arriving about October, when the seeds of the alder are its principal attraction, and occasionally congregating in large numbers. It may then be found among copses and marshy land, or on open commons and boggy places bordering the little streams in St. Leonards forest, in the *gills*—a Sussex term signifying the deep wooded ravines—wherever the alder abounds, the seeds of which form its favourite food, and, in search of that seed its attitudes are very like those of the Titmice, as often as not head downwards. At this time it is so tame that I have more than once heard of its being caught with a noose at the end of a fishing-rod. While it is feeding it keeps up a constant twittering. In the winter of 1871 or 1872 a flock frequented, for a few days, some old alders at the head of the upper pond at Woldringfold, near Cowfold, three or four of which were sent to me. I have also seen it busily engaged on the seeds of the birch. It is in high estimation as a cage-bird, and is often taken in the clap-net. It will breed freely with the Canary-bird. In my own notes I find, that in October 1839, several, males and females, were caught at Hove. It has frequently been observed among alders, near the Hassocks Station of the L. B. and S. C. Railway, and, at the proper season, it may be met with wherever that tree is plentiful. In Mr. Jeffery's p. n. I find the following remark:—"July 3rd, 1867. I have just heard from Mr. G. Drewitt, of Oving, that a pair of Siskins have built, and hatched out their young, in the garden of Mr. Birrell, the rector of that parish." Mr. Jeffery also records (Zoologist, p. 597), that on October

12th and 13th, 1866, it was seen feeding on alder seeds, in company with the Lesser Redpoll, and that the Siskin is the rarer bird of the two. The nest is said to be very like that of the Chaffinch, but smaller.

MEALY REDPOLL.

Linota linaria.

THE Mealy, known to bird-catchers as the Stone, Redpoll, has by some been regarded as only a large variety of the Lesser Redpoll. It appears very irregularly in the winter, sometimes in large flocks, but is never so abundant as the species next to be described, and its numbers appear to have decreased considerably of late years. It was unusually common in the neighbourhood of Brighton about 1875, since which time it has been comparatively rare. I have never myself had many opportunities of observing it. On the north side of the Downs, a short distance from them, Poyning's Common, which is covered with rushes and coarse herbage, and bounded on one side with brushwood and high timber, used to be one of its favourite places of resort, where it fed on the seeds of the thistle and of the common knapweed (*Centaurea nigra*), and thus engaged, I once saw about a dozen, some of them very brightly coloured, and admitting a very near approach. Further into the Weald I have neither met with nor heard of it. Most of those that have been found have been on the cultivated land between the Downs and the sea. It has never nested in the county, nor is there any record of the bird having been seen later than the middle of February. It has probably acquired the title of *Mealy* Redpoll from the elongated white fringes to the plumage, which it assumes in the winter, giving it the appearance of having been powdered over with flour.

LESSER REDPOLL.

Linota rufescens.

THIS, the smallest Finch which visits us, is seldom met with in the Weald, and I have but once seen it there. Its habits are similar to those of the Siskin, and, like that species, it delights in the seed of the alder, in search of which they are occasionally found in company. Although it has nested in each of the adjoining counties, and I have myself received an egg taken by the late Mr. Bury in the Isle of Wight, I have never heard of its having done so in this county in a truly wild state. Mr. Booth has, however, mentioned that a few nests were found in elders and willows, in 1869, near Brighton; he supposes, from the worn and faded appearance of the birds, that they had escaped from confinement.

In the winter it is often captured in very large numbers in clap-nets, no bird responding more readily to the note of the call-bird. At the time of immigration it has frequently been taken in small traps on the roofs of the houses in Brighton and Hastings. In confinement the red portion of the head changes to yellow after the first moult.

LINNET.

Linota cannabina.

THROUGHOUT the county, except in the large woods, this species is universally distributed. It is resident, and breeds especially in furze-bushes, and in all our gardens and shrubberies, forming its nest of roots, and lining it with wool. It

is a good songster, and in the winter assembles in very large flocks, and many hundreds annually fall victims to the bird-catchers. It feeds on small seeds of all kinds, and, like many of its congeners, is, in the spring, very destructive in the kitchen garden, but feeds its young principally on caterpillars and insects, thus perhaps doing more good than harm.

TWITE.

Linota flavirostris.

THE Twite, known also as the Mountain Linnet, arrives in this county only in winter, confining itself entirely to the coast, especially to the salt-marshes, and those portions of the mud-flats which are dry and covered with coarse herbage. In such spots I have particularly observed it in small flocks just above the bridge at Old Shoreham, and in February 1841 I shot several there, and also fell in with a small party, in company with the Brambling and Tree-Sparrow, picking up the corn by the side of an oat stack in the parish of Lancing. It is also frequently found on the beach. Like the Common Linnet it is much prized by bird-fanciers, and, though it has but a poor song, in severe weather it is caught in great numbers. It breeds in the Northern Counties, where the nest resembles that of the Common Linnet, and is generally placed in a furze-bush.

BULLFINCH.

Pyrrhula europæa.

IN every part of the county, where there are high hedges or tangled copses, the whistling call-note of the Bullfinch may be often heard, though the bird itself is naturally wild and retiring, keeping to the interior of the thick bushes, but it will often show itself if one remains perfectly quiet. In spring they enter the gardens, and then have the credit of doing great damage, especially to the gooseberry bushes, by picking off the buds to such an extent that I have been asked to shoot them, though I think that the shot often does at least as much harm as would be done by the birds. If you squeeze one of them, and pass your thumb up from below the throat, it will discharge the buds, when you will find that they have been swallowed whole, and though there is the embryo of the blossom in each, I have nevertheless often thought that they do more good than harm, for the crop of gooseberries is generally as great as the bushes ought to bear, and the fruit is the finer for the thinning.

The nest is constructed of small sticks at the base, most artfully laid together, then comes a first lining of long roots, and, after that, a second of very fine ones. It is often built in a thick bush, or a closely-clipped quickset hedge. At this period of the year it is very tame, and I have known the nest in an *Arbor vitæ* close to my window, also in a *Pyracanthus* trained close to the window of a cottage. To the berry of this tree the Bullfinch is especially partial, as it is to the seed of the wild rose, and those of several other berries, though it feeds its young with insects and half-digested green buds.

I have heard it remarked that this bird is extremely silent, and that its call-note is the only one it possesses. The fact is that its natural song is an inward warble, so low that unless one is close to it, it is not likely to be heard. During its delivery it puffs out its feathers and labours violently, as if it thought it was making a great noise. It is valued as a cage-bird for its beauty, and for the facility with which it acquires artificial notes from a flute, or bird-organ. Though this bird in confinement occasionally becomes black from overfeeding with hemp-seed, I have known one instance of a brood of four, taken near Hayward's Heath, which were all black from the first, and one of them is in my collection. I mention this, because I think for a whole family to be of an abnormal colour, in an undomesticated state, is extremely uncommon.

SCARLET GROSBEAK.

Pyrrhula erythrina.

THIS species has only once been taken in Sussex. In Yarrell's 'British Birds' (vol. ii. pp. 172-3) we read as follows:—"The first unquestionable appearance of the Scarlet Grosbeak in this country seems to have been recorded by Mr. Wonfor (Zoologist, s. s. p. 1918), and the statement was confirmed by Mr. Bond (*op. cit.* p. 198 $\frac{1}{2}$), a hen bird having been caught on the Downs, near Brighton, in September 1869. This example was seen by the writer in Mr. Monk's aviary at Lewes, and lived there until June 1876." Its habits are described as much resembling those of the Linnet, though it affects marshy coppices rather than the open country. It is also called Scarlet Bullfinch.

PINE GROSBEAK.

Pyrrhula enucleator.

THIS extremely uncommon visitor is reported to have appeared twice in Sussex. It is an inhabitant of all the coniferous zone of the northern parts of both the Old and the New World, and possesses much of the retiring habits of the Bullfinch. It is almost always a tame and unsuspicious bird, and has acquired a reputation, quite undeserved, for stupidity. The cock, in early spring, utters his melody from the summit of a fir tree, chiefly at sunrise and sunset (see Yarrell's B. B. vol. ii. pp. 184-5). Mr. Knox, in his O. R. makes this statement:—"I can record but two instances of this rare bird in Sussex; an example was shot near Cotes House, about three miles from Petworth, while feeding on the seeds of a Pinaster, by a gentleman of the name of Mellish, who, being well acquainted with British birds, at once recognized the species. In February 1848, two were killed at the same time in Ashdown Forest, one of them, which I saw, was an adult male." But in the 'Zoologist' for 1877, p. 247, concerning these two specimens, Mr. J. H. Gurney, Junr., writes:—"Although it was believed at the time that they had been killed as stated, Mr. Knox informs me by letter, that he now almost begins to doubt them."

In the same paper Mr. Gurney also states that he saw in the possession of Mr. T. J. Monk, of Lewes, a handsome yellow male bird obtained at Shoreham, near the old bridge.

CROSSBILL.

Loxia curvirostra.

ROAMING over the county in large or small companies, this species may be found occasionally, in any month of the year, wherever there is a plantation, or even a clump, of fir-trees. My earliest note refers to January 1836, when two in the red, and one in the green plumage, were shot, out of a flock of about a dozen, at Nuthurst. In July 1838, a party of about the same number visited a garden at Henfield, out of which I shot one red and one green specimen, as they were extracting the seeds from the cones of a Scotch fir. Their method of doing this is by inserting both mandibles between the laminae of the cone, and giving a twist, when, I suppose, the seed falls into the mouth, as I never could see anything of it on the withdrawal of the beak. They remained in that garden, or in the neighbourhood, for several days. On the 29th of the same month and year, my attention was attracted by the shrill note of a little flock of these birds as they flew over my head. Following them, I found about a dozen on some larch firs; and on the next day I again saw several in the garden at Henfield. In August of the same year, I met with them again at Uckfield, and the points of the bill of five which I shot were much more elongated than in any I had before seen. The red birds had a great admixture of orange-yellow. In March 1840 one was brought me from St. Leonards forest. This was in the red plumage, and was moulting, the new feathers on the throat being of a light orange-colour, as were the few which were expanded on the breast.

In February 1839, several were shot at Hurstpierpoint and at Ringmer.

In January 1861, a flock of some sixty or seventy flew over my head in a large plantation of larch, near Crawley, when my attention was drawn to them by their letting fall several cones of that tree. They settled at no great distance, when I had an excellent view of their parrot-like manners, as they frequently used their bills in climbing to different parts of the branch, or, standing on one foot, held the cone in the other while extracting the seed; and I observed that they frequently carried a cone with them when flying from tree to tree.

I once received a nest, with eggs, from St. Leonards forest in March, but I have not recorded in what year. It was about twenty feet from the ground, on the branch of a Scotch fir, close to the stem. The nest, or perhaps only a portion of it, the only one I have myself seen, was constructed of dry grass, lined with finer grass, and a little rabbit's fur, and finished with horsehair. Gilbert White mentions this bird as appearing annually at Ringmer. Mr. Knox (O. R. p. 212) states that "in the autumn of 1835, great numbers of these birds were observed in most of the pine and larch woods in Sussex. They were abundant at Salt Hill, near Chichester, and in that neighbourhood, and at Parham." Mr. Jeffery observes that in July 1866, a male was obtained at Chidham, and another, the following September, at Sidlesham.

PARROT CROSSBILL.

Loxia pityopsittacus.

THE habits of this species, which was formerly considered only a large variety of the Common Crossbill, but is now held to be distinct, are similar to those of its congeners. I have a specimen in the red plumage, which was shot in St. Leonards

forest in March 1870. One is recorded (Zoologist, p. 6329), by some one whose name is not given, thus:—"I saw the bird, 'in the meat,' in Mr. Swaysland's shop. It had been caught at Bognor, by a bird-catcher in clap-nets, November 2nd, 1858. The bird bit his fingers so much that he dared not place it with the newly-caught Goldfinches, and was therefore obliged to kill it. It had a very large beak, with the cross not nearly so much developed as in *Loxia curvirostra*. There was a little yellow on the head. It was curious to find such a bird apparently a long way from any of its appropriate food." It is a native of the pine-forests of Northern Europe, appearing in winter in Germany and Poland occasionally, sometimes in Holland, Belgium, and France.

ICTERIDÆ.

RED-WINGED STARLING.

Agelæus phæniceus.

THIS is a very abundant species in North America, and a common cage-bird in this country.

The particulars of the only two specimens which have been recorded as obtained in this county, are as follows:—One, stated by Mr. Jeffery (Zoologist, p. 8951) to have been killed on December 25th, 1862, at Sidlesham, and to have been found in a hedgerow. He believed it to be a male, but, it being shot in the back, he could not tell by dissection. The gizzard contained, besides small gravel, some round black seeds; it was in good condition, and showed no signs of having been in confinement. The second example is a male, said

to have been caught near Brighton, March 21st, 1866 ; kept some time alive in a cage, and now in Mr. Monk's collection. In its native country, North America, it is very destructive to corn, but also devours great numbers of insects.

STURNIDÆ.

STARLING.

Sturnus vulgaris.

THIS sprightly and familiar bird is found throughout the county ; and in the spring affects houses and farm buildings, breeding in the chimney-stacks and water-pipes, from which it is very difficult to eject it, for, though several may be shot, others will take their places most pertinaciously.

Neat as it may be in appearance, it is very untidy in its habits, scattering the nesting materials about wherever it takes up its abode. It is fond of cherries, but its food consists very greatly of aphides and grubs, and of small land mollusks, of which I have found many in the interior of Starlings which I have examined, chiefly *Zoa lubrica* and *Zonites purus*. It often accompanies the cattle in pastures, feeding on the crane-flies and other insects disturbed by their feet.

At certain times of the year they assemble in large cloud-like flocks, and, at this time, they roost in great numbers in the reed-beds and in the underwoods, breaking down the reeds in the former, and in the latter destroying the vegetation on the ground by their droppings. On arriving at these spots they perform many evolutions, with great chattering, before they settle, when they swoop down suddenly and not a note is heard. They nest also in

holes in trees and chalk-pits, often in sea-cliffs, building a rude nest of straws and hay, or any rough materials, with many feathers, bits of worsted, &c.

The Starling has a very chattering note, as well as a pleasant warble, and readily imitates the songs of other birds, or the mewling of a cat, or sound of a saw, and it is easily taught to speak many words and sentences.

ROSE-COLOURED STARLING.

Pastor roseus.

VERY rarely, and at long intervals, this species has appeared in the county. In its general habits and notes it much resembles the Common Starling.

In its native country, South Russia, Turkey, Greece, &c., it assembles in large flocks, following, or sometimes preceding, as if they expected their arrival, the flights of locusts, and feeding on them, as well as on beetles and fruit. It nests in large companies in holes of buildings and in quarries.

I have in my collection a beautiful adult male, which was shot from the back of a sheep, near Brighton on August 20th, 1870. Another was in its company, and was shot at the same time, but of which sex I have no information : they are recorded in the 'Field,' and in the 'Zoologist,' p. 2344, s. s. Another adult male was shot by Mr. Massie, of Warnham, near Horsham, where it was shown me soon after by a bird-stuffer.

Mr. Dennis, then Rector of East Blatchington, informed me that two specimens were shot in that neighbourhood in August 1855, one, a male in full adult plumage, the other, in moult. They were shown him by Mr. Potter, formerly a

bird-stuffer in Lewes. The first was the property of Mr. Fuller, of Tarring Neville, by whom it was shot; the other, of the sex of which I was not told, was killed by a gardener at Piddinghoe, who, on Mr. Potter calling at his house, brought it from his garden, where he had just shot it. A fine specimen was shot at Bexhill, in August 1871, and sent for preservation to Mr. Kent, of St. Leonards-on-Sea (Zoologist, p. 2765, s.s.) It has never nested in Britain, though it has occurred as early as May and as late as February.

CORVIDÆ.

CHOUGH.

Pyrrhocorax graculus.

I FEAR that the Chough is now extinct in Sussex. I may mention that I had a good opportunity of watching the habits of this bird in co. Mayo, Ireland, where it is still numerous. Several authors have stated that Choughs never settle on the grass; there, however, I saw them every day on it, searching about like Starlings in front of the house, and picking up something from the turf. They might be heard chattering Irish down the chimney of my bedroom early in the morning. I generally saw them flying about in little parties, over the patches of oats and potatoes. They breed on the cliffs, and on ruins of old castles, near the sea, building their nests, in the most inaccessible crannies, of sticks and seaweed, feeding on beetles and grubs, as well as on crustaceans and shell-fish, and are said to dig up young potatoes. The note of the Chough when flying, somewhat resembles that of the Daw, but is pitched in a much higher key.

It frequently rolls over in its flight, and falls to a considerable distance, after the manner of the Raven.

Merrett, writing in 1667, speaks of it as found along the whole coast, from Cornwall to Dover. Gilbert White, writing in 1773, states that it bred on Beachy Head, and on all the cliffs of Sussex. Markwick, that this bird frequents the South Downs about Beachy Head and Eastbourne; and Mr. Woolgar, who died in 1821, says in his catalogue of the birds of the environs of Lewes, printed in Horsfield's history of that town, that it "builds on the cliffs on the coast. Common at Beachy Head." Mr. Knox (O. R. p. 213) says,—“This was certainly its last stronghold; but it disappeared from the coast about twenty years ago.” It is in evidence that Choughs were given occasionally by Cornish gentlemen to their friends in other counties, and Sir Thomas Gage, in his ‘History of Hengrave,’ records one thus sent by a Carew to Kytson, of Hengrave, in Suffolk. I hear from Mr. Dennis, some time rector of East Blatchington, that a Chough was brought to him on January 29th, 1868, by one, Joe Barker, who had just shot it between Seaford Head and the Puck Church. It was in good condition and plumage.

There is a legend that the Choughs, which formerly bred there, were derived from a pair which had escaped from confinement; but Mr. Dennis informs me that he never heard the story, and believes that it must have originated from the fact that a gentleman turned out a pair of Magpies, which bred for years on a solitary tree in front of the town of Seaford. The gentleman paid blackmail to the boys not to molest them. When he left, they were soon destroyed, and the tree has long since perished.

Mr. Dutton, writing in the ‘Zoologist’ for 1864 (p. 9099), remarks:—“An old shepherd says, ‘Them there red-legged Crows was common at Beachy Head and Bell Tout about forty years ago.’”

RAVEN.

Corvus corax.

THE Raven is now become a rare bird in Sussex, and its breeding-places are very few. It is extremely voracious, and, though feeding on any living animal it can master, hares, rabbits, rats, &c., as well as on young lambs, or even full-grown sheep, if found in a state of weakness, a dead carcass of any kind is a particular attraction. It feeds also on freshwater mussels, as well as on marine shell-fish, or any animal matter it may find on the sea-shore, though near its nesting-places it is said to do little damage, driving off any Hawks, or other intruders, from its neighbourhood. In my own notes I find the following:—"The Raven has for many years bred annually in Danny Park, Hurstpierpoint. A fine adult female was shot there in January 1840, which was afterwards presented to me. Having been much disturbed in the park, these birds forsook the spot, and betook themselves to a plantation on the side of the neighbouring Wolstonbury Hill, one of the South Downs.

"On April 16th, 1855, I visited this new settlement, and found that the nest was built in an old Scotch Fir, about 50 feet from the ground. The birds were very anxious and clamorous, flying round and alighting on the trees, sometimes within 200 yards or even nearer, or soaring over our heads uttering their bark-like cry. A few days before, a boy had been up to the nest, and found in it four young birds newly hatched. He said that the old birds, when he was at the nest, were very savage, and darted down several times to within a few feet of him."

Though it has nothing to do with the birds of Sussex, I

may mention that on December 2nd, 1837, I saw in Cambridge Market five young Ravens, quite in a callow state, which had been taken within a few miles of that town, the only instance in which I have known the young of any bird to have been met with in this country, at that time of year, in an undomesticated state.

It still breeds every season on the cliffs, and formerly did so in Burton Park and at Parham. Mr. Knox, O. R. (p. 150), states that they also bred in Petworth Park, but had been missing for many years, till, to his surprise, when riding one day in 1843, in the park, he heard the unmistakable croak of a Raven, and perceived it dashing among a flock of Jackdaws, which it succeeded in driving from the precincts of its nest. This he found placed in a fork near the top of one of the highest trees in a clump of beech. The holes in the trunks were occupied by a colony of Jackdaws. In the following year this clump of beech was deserted for one of fir, and there Mr. Knox again found them breeding. After this, the nest was robbed by a boy, but the young birds were fortunately discovered and restored to the nest, when the parents again took to and reared them.

The late Bishop Wilberforce, in his review of Mr. Knox's O. R., in the 'Quarterly Review' for September 1849, vol. lxxxv. pp. 489, 490, makes this observation:—"In the spring of the year the Ravens returned to their old nest, and repaired and occupied it according to their wont; incubation had already begun, when a violent spring storm actually beat the mother from her nest, and scattered the eggs upon the ground. After a few days the Ravens began to repair the damage of the storm, and, abandoning the unfortunate tree, they constructed upon another their new nest. . . . A second storm, almost as soon as the nest was completed, again marred their work, and actually tore the nest itself from the tree. For a few days the Ravens were missing;

after this they returned, but conjugal disagreement finished what the violence of the wind had begun. The work of nidification was recommenced, but one bird was set upon repairing the original, the other, upon building a new nest. For a day or two the divided work proceeded, when, as if by mutual compromise, both abandoned their separate undertakings and flew off together in search of a more favoured spot. The appearance at the same moment of a pair of Ravens, who proceeded forthwith to build and incubate at Parham Park, about eight miles distant, seems to mark out that place as the haven of their choice. ‘*Italiam læti Latiumque petamus.*’” There was, however, a Raven’s nest at Parham Park long before the arrival of those birds, and I suspect there were Ravens nesting in that Park for many years before. About the year 1830 a pair nested near the summit of the ruined gateway-tower of Bramber Castle, and again in 1843; but these last were unfortunately shot. Mr. Booth says, that in passing over the South Downs in 1876, near Saddlecombe, during September and October, he noticed a pair of Ravens flying from the Dyke Hill. A year or two later, a dead body, or rather a skeleton, of a man was found in a patch of furze near the top of the hill, and that as the Ravens had been often noticed about the same spot, he had not the slightest doubt they had discovered it, and had returned to it regularly, as long as there was anything to attract them.

GREY CROW.

Corvus cornix.

ALTHOUGH this species and the Black Crow are now considered to be identical, its habits in this county do not

appear to warrant that opinion. For, whereas our present subject does not appear there till October, departing in March, I have never known any accession to, or diminution of, the numbers of the Black Crow at either period. The latter birds, too, pair *inter se*, in March, yet I have never known them to do so in Sussex with the Grey Crow, a circumstance which, had it occurred, would surely have been noticed by some one. Why, if they are of the same species, does the Grey Crow always leave us to a bird, and the Black Crow breed here? It is equally persecuted wherever it goes, being welcomed with strychnine in a piece of carrion, or in an egg, placed for it in all directions, whether in England, Scotland, or Ireland, no bird being more destructive to the eggs or brood of any game, especially of Grouse. Surely the circumstance of their breeding together in the northern counties can be no proof of their being the same species. On the 4th of January, 1841, I witnessed an interesting chase of, I believe, a Common Bunting, by one of these birds whose manœuvres in the pursuit were perfectly marvellous, as it followed every twist and turn of its intended victim, and this continued as long as they were in sight. As the Bunting was evidently growing fatigued, I have little doubt that the Crow succeeded in capturing it. Mr. Booth, in his 'Rough Notes,' states that he has seen this Crow pursuing birds, which appeared fatigued by a heavy gale, far out to sea, and over it they will often hover, and drop upon any floating garbage they can discover. All along the coast it may be found during its short visit, feeding about the roads and the manure heaps, and the more filthy its food the more it seems to enjoy it.

Inland, it is seldom met with, though I have now and then seen one some eight or ten miles from the coast. It retires at night to the plantations on the Downs, those about Brighton, for the most part, roosting in the beech woods in

Stanmer Park. It is known as the Grey, Royston, or Saddle-backed Crow.

BLACK CROW.

Corvus corone.

THIS Crow, formerly very abundant all over the county, is now, from its persecution by the gamekeeper, far less so, and bids fair to become altogether extinct. Its habits and food are similar to those of the Raven, and, like it, it is never found in flocks, not more than a pair, or at most the parents and their young, being seen together. The nest is generally on a tree of moderate height, and usually placed on the top of the trunk at the divarication of the principal boughs. Although not associating together, I once found no less than seven nests in one wood of about ten acres. This was in April, and they all contained eggs or young.

The nest is neater than that of the Rook, and is formed externally of dead sticks, copiously lined, often with dry horse-droppings, overlaid with a thick layer of wool.

Though said to migrate southward in autumn, I have always found the numbers about the same throughout the year, except from the addition of young birds in summer. In winter it frequents the sea-coast for what it can find on the beach. I have twice seen it strike down a bird on its flight—once a pigeon, which I picked up, and once a small bird, which it carried away in its beak. It is generally known as the Carrion Crow. It is particularly fond of the large freshwater mussel, which it opens by violent blows on the ligaments which attach the valves.

ROOK.

Corvus frugilegus.

So much has been written respecting this species, that I have little, or nothing, new to say about it. As it has been disputed whether, or not, it feeds on carrion, I may state that I have often seen it tugging away at the pieces of horseflesh hung up by the keepers in the trees, as food for their dogs. Several winters ago, in a deep snow, a fox carried off three pinioned Sea-Gulls from my own premises. I observed, in three places in the meadow close to my house, several Rooks busily engaged, and, on driving them off, I found the bodies of the gulls, the head of each having been doubtless eaten by the fox, the remainder being quite freshly torn about by the Rooks. I left them, and the Rooks shortly returned, when, with a binocular, I saw them swallow down several pieces of the Gull's flesh. The Rook is very destructive in gardens, digging up and devouring the crocuses and tulips; it is also particularly fond of green walnuts. Several years ago the late Sir Percy Burrell, wishing to establish a Rookery at West Grinstead Park, procured some boughs of trees with nests containing young from about half a mile off, and fixed them in a clump of old oak in the aforesaid park. The parents came there, and the young were brought up, and a considerable Rookery is now established.

There was, until a few years ago, one of the largest Rookeries in the county, at Woodmancote. The timber, which was some of the finest oak in Sussex, was cut about 1876. All the birds of the smaller Rookeries, from long distances, used to resort to this place in the winter, visiting occasionally their own colonies to repair the nests. Since

the destruction of this grand establishment, several smaller Rookeries have sprung up in the county.

Before a gale, I have often seen Rooks ascend to what Gilbert White would call a prodigious height in the air, circling about, and now and then descending rapidly, nearly to the ground, and continuing these manœuvres sometimes for an hour together.

In Daniel's 'Rural Sports,' 1807, vol. iii., we find the following :—"Between the Rook and the Raven there appears a wonderful antipathy. Mr. Markwick says, that in 1778, so soon as a Raven had built her nest in a tree adjoining to a very numerous Rookery, all the Rooks immediately forsook the spot, and have not returned to build there since.

At the Bishop of Chichester's Rookery, at Broomham, near Hastings, upon a Raven building her nest in one of the trees, the Rooks left the place. They, however, returned to their haunts in the following autumn, and built their nests there the succeeding year. It is no very difficult task to account for this antipathy; the Raven will scarcely suffer any bird to come within a quarter of a mile of its nest, being exceedingly fierce in defending it; besides, the Ravens seize the young Rooks from their nests, to feed their own: this, at Mr. Seymer's, at Harford, in Dorsetshire, Mr. Lambert was eye-witness to, and there was no rest in the Rookery, night or day, till one of the old Ravens and the young ones were destroyed."

The Rook occasionally builds on trees in our towns, as, for example, at Brighton, where it may often be seen settling on the pinnacles of the Pavilion.

DAW.

Corvus monedula.

THE Daw, generally called the Jackdaw, is resident and abundant, associating much with the Rooks, building in the hollows of the trees of the Rookery, and sometimes in the masses of old Rooks' nests, the accumulation of years; it frequents also the higher spires in our towns, and is fond of breeding in old chimneys, or on the flights of steps, and in apertures in ruins and ancient buildings, as well as in cliffs and chalk-pits. The Daw is a sad thief, and is greatly attracted by any bright object, such as a teaspoon, or piece of money, which it will hide in some corner or cranny; it will often steal sticks used for marking the plants in gardens, and is a very familiar bird, and exceedingly amusing. It constantly accompanies the Rooks in their excursions, and, like them, indulges in extraordinary aerial evolutions, chasing one another and tumbling in the manner of certain varieties of the tame Pigeon. It feeds on garbage of all sorts, as well as on grubs, beetles, &c., and is very fond of walnuts. It uses large quantities of sticks, sometimes more than a bushel, in the construction of its nest, lining it with quantities of horse-droppings, shavings, and wool.

PIE.

Pica rustica.

THIS beautiful bird, which appears at a distance to be merely black and white, has, in fact, but little real black about it, and that only on the head, neck, and upper part of the back,

the rest of the dark portions of its plumage being shot with green, bronze, and steel-blue. It is exceedingly cunning, and a great enemy to the game preserver, killing young hares and rabbits, and stealing the eggs and young of Partidges and Pheasants from the coops. It builds a rough and bulky nest in the branches of a high tree, doming it over, and composing the foundation of sticks, and the interior of fibrous roots, turf, and grass, forming a deep cup, which it then plasters with clay. The dome is more lightly built of the thorniest sticks, making a sort of *chevaux de frise* projecting outside in all directions. The entrance is in the side, just proportioned to the size of the bird. When the female is sitting, a person waiting to shoot her often finds it difficult to make her leave the nest, even by striking the tree with a stick, and when she does so she suddenly descends perpendicularly, keeping the trunk of the tree between herself and her foe, and thus often escapes for a time. It, however, sometimes chooses for its site a thick hedge, or closely grown hawthorn, perhaps quite low down, and when this is the case it is called in Sussex the "Bush Magpie."

It formerly bred freely in all parts of the Weald, but, from constant persecution, it has now betaken itself chiefly to the thorn-trees in the deep valleys of the Downs. Great numbers were formerly taken in steel traps baited with a hen's egg, this being an irresistible attraction.

It is a favourite cage-bird, being amusing in its actions, and readily tamed, and taught to talk, imitating, of its own accord, the various noises around it.

Besides the food already mentioned, it has a strong penchant for cherries and peas.

JAY.

Garrulus glandarius.

THIS very gaily dressed bird is still fairly abundant in most of our woods and copses, and is rightly named *garrulus*, as its whereabouts is constantly proclaimed by its squalling and harsh cries, at all times of the year, except in the breeding season, when it is so silent that, unless from occasionally seeing the old bird, no one would suppose there was a Jay in the neighbourhood. Of this, I can give a notable instance: I was sitting on a seat in my own garden, under a very thick evergreen oak, a conspicuous object from my window, when, to my surprise, I heard the cry of a young Jay overhead, and, on looking up, there was the nest, though I had not seen or heard the parents about the premises.

This is the only one of the *Corvidæ* which attempts a song, and a strange medley it is, of an inward chattering and gurgling warble, mingled with an occasional imitation of the notes of various other birds, and perhaps, now and then the mew of a cat, or bark of a dog. During the utterance of these notes, it is usually concealed among the thick foliage. It builds an open nest, about 15 feet from the ground, on the top of the trunk of a tree, in the underwood of a coppice, or in a thick bush, on a considerable platform of sticks, and lines it very neatly with fine roots.

I have several times shot this bird with a mouse in its bill, and two or three times with a young Partridge in the down, and once an old Tree-Pipit. As this last was in May, it had probably captured it while sitting on its nest. It is fond of maize and fruit, and, if it has a chance, does great damage amongst the peas in the gardens. It is also a great devourer of eggs, and is constantly caught by the keepers, by

placing a Thrush's nest on a little platform of turf four or five feet from the ground, among the underwood, and surrounding the nest with steel traps. In captivity it will imitate the noises of the neighbourhood. The blue feathers of the wing are in great repute among anglers for the dressing of their salmon-flies. It is frequently much infested by a species of *Hippobosca*.

NUTCRACKER.

Nucifraga caryocatactes.

THE only occurrence of this bird in Sussex is the following :— On the 26th of October, 1844, I saw one at a bird-stuffer's in Brighton, which I was told he had received, in the flesh, from a farmer of the name of Newman. On him I called, and was informed that it was shot by his nephew, Mr. Roods, at Littlington, on the 26th of the previous September. It was flying across a turnip-field, and appeared to have risen from a stubble near at hand. Unfortunately the interior had been removed before it was sent to Brighton. It is a mature bird. The sex was not ascertained, nor what it had been feeding on. I bought it, and have it still. It is said to be not uncommon in some parts of Europe. The following account by a lady relative, Mrs. Blackburne, of Henfield, a great and accurate observer of birds, gives so graphic a description of its manners, that I think I may, as the lawyers say, "put it in;" it was written out at my request in March 1890 :—

"You asked me to give you an account of the Nutcracker which I saw in Switzerland.

"We were walking from the Eggischhorn to the Bel Alp,



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THE NUTCRACKER.

THE NUTCRACKER.
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and, when we had passed the Reider Alp, began to descend the rugged side of the mountain, which is covered with fir-trees, through which the path is cut in steep zigzags to the edge of the Great Aletsch glacier in the valley beneath. We had scarcely entered the wood, when I heard the call of a bird whose note was quite new to me, strong and loud, yet full and rich, reminding me of the Australian Crow, whose note I had heard in confinement. My brother thought it was harsh, but I thought it only clear. We both watched, and saw the bird busy at the top of a fir-tree, searching among the cones. It seemed very wary, but not shy, and as we could only see it against the sky, it looked black, and it flew away before we could make out what bird it was.

“A short time after, I heard another call, and proceeding very quietly, I saw the bird busily at work on the top of a fir-tree pounding into one of the cones, using its powerful beak like a hammer, as the Nuthatch and the Tits do. Before we got down to the edge of the glacier, we saw five or six of the birds. I think they were a family party, they answered each other's call, and flew from tree to tree, always settling quite on the tops of the firs and holding the cones with their feet together, beating into them with their beaks. I could not get near enough to see the spots clearly, they looked a brownish black. I consider they were young birds of the year, and, like Starlings, not getting their full plumage till after the moult. I have no doubt as to their being Nutcrackers; there seems no other bird they could possibly be. I was very glad to have the opportunity of watching them. They looked about the size of small Jackdaws, but it is always difficult to judge accurately the size of birds in very wild and bold scenery.”

The editor of Yarrell's ‘British Birds’ (vol. ii. p. 335), describes a nest in his possession as five or six inches in thickness, with an outside diameter of about a foot, and six inches

across the interior. It is composed outwardly of sticks and twigs of larch, spruce, and birch; all, as the swollen state of their buds show, freshly plucked, as is also the grass with which it is thickly lined. . . . In some nests a considerable quantity of earth, or rotten wood, underlies the lining, which occasionally consists of hair-like lichen. Mr. Hancock, in his 'Catalogue of the Birds of Northumberland and Durham' (p. 40), after giving an interesting account of a Nutcracker which he kept six years in confinement, makes the following remarks:—"Its voice was very peculiar; it had an extremely harsh loud cry, resembling the noise produced by a ripping saw while in full action. This cry was so loud that it could be heard all over the house. It had also a sweet, low, delicate, warbling song. This was uttered only when everything was perfectly quiet. The song was much varied, and was continued for some time. So low and delicate was it, that it could only be heard when the bird was close at hand, and the note seemed as though it were produced low down in the throat. The song was occasionally interrupted by a few low creaking notes, like those produced when a corkscrew is being used."

HIRUNDINIDÆ.

SWALLOW.

Hirundo rustica.

THE average date of the arrival of the Swallow in this county is, according to notes kept by myself for more than thirty years, the 6th of April, but they are seldom numerous till about a week later. I once witnessed the, apparently, first arrival of a considerable company of these birds, which settled

together on the branches of an ancient pollard ash, and were so fatigued that several dropped from the tree, and even allowed me to pick them up and put them on the somewhat flat surface of a large limb, where they remained quiet for more than half an hour. This was at least four miles inland, and I never could understand why they had not rested sooner; but I suppose the distance to a Swallow in full flight is a matter of very few minutes, and hardly appreciable.

The nest is built of mud, mixed with small pieces of hay or straw, and lined with feathers, which the Swallow, like the Martin, often, perhaps always, catches in the air. It is saucer-shaped, and though often placed in a chimney, about six feet down the shaft, is more commonly found on the surface of a beam in a barn, or under the roof of a porch, or out-house, perhaps under a bridge, or the arch of a gateway. I once found one in a small box left on the seat of a summer-house; and, when a boy at school, saw one in the same situation as that mentioned by Gilbert White, namely, on the back of a dried Owl, which he says went to the Leverian Museum. My specimen was hanging up in a barn at Westergate, near Chichester; what became of it I do not know. When the young are hatched, the parent birds collect a large quantity of gnats and small *Coleoptera* in their mouths, with which to feed them. At this time, on the approach of a person to the nest, it will swoop down at his head, making a snapping noise with its beak, as it will also at a dog or cat. I have seen them caught by boys, with a fishing-rod, with a small white feather, or piece of paper on the hook. Should a Hawk come in sight, they will collect, and mob him and drive him off. They assemble in large numbers on roofs and telegraph wires, previous to their departure from the country, and the main body have all left by the end of October.

The young may be known on the wing, by the absence of the elongation of the outer feathers of the tail.

MARTIN.

Chelidon urbica.

THE Martin arrives a little later than the Swallow, about the middle of April, and the main body have left us by the middle of October. I have, however, occasionally met with a few as late as November, on the 5th of which month I once observed four, hawking for insects around the castle at Lewes. These were young birds, as has been the case with nearly all those I have seen so late in the year. These birds are much persecuted by the Sparrows, who frequently take possession of their nests, and not always with impunity; for in two instances I have seen the Martins stop up the entrance of one, in which the Sparrows had young; once at Shelford, near Cambridge, about the year 1839, and again at Martin Lodge, Henfield, in 1842 or 1843. In the former case seven Martins were busily thus engaged, and in spite of the resistance of one of the old Sparrows, if not of both, from the inside of the nest, they succeeded in imprisoning them. The Martin usually affixes its mud-built nest on the wall under the eaves of a house, or beneath the architrave of a window, sometimes on the underside of a mass of chalk projecting from a cliff. A colony of these birds will frequently breed in close proximity, and a row of perhaps a dozen nests may be seen together. They seldom alight on the ground, except when collecting mud for their nests, the feathers with which they line them, being often captured in flight while floating in the air.

SAND-MARTIN.

Cotile riparia.

THIS, the smallest of the British Hirundines, arrives, in most years, a few days earlier than the Swallow, making its appearance near some river or pond. It is seldom seen far from the water, except in the breeding-season, at which time it resorts in considerable numbers to sand-pits, railway-cuttings &c., in the perpendicular faces of which it digs out nearly circular holes, that, unless interrupted by a stone, or a stratum too hard to penetrate, it excavates to the depth of about two feet, straight or crooked, according to the nature of the soil, clinging, by the support of its tail, or sometimes head downwards, and scratching out the earth with its feet : at the further end of the hole it forms a neat nest, composed of fine grass, lined with feathers, preferring those of the Goose. It feeds its young on dragonflies and other insects. Though generally silent, the male has at this time a soft twittering song. Its flight is wavering and butterfly-like. It usually avoids the neighbourhood of houses, but occasionally makes use of the holes in masonry, called in Sussex "putlog" holes. It is rarely met with on the Chalk, or in the district between the Downs and the sea. It is much infested by fleas, which may often be seen in multitudes in and around its holes. The Sparrows greatly persecute it, and often possess themselves of its hard-earned abodes. It does not congregate, like the other Hirundines, previous to its departure, but all have left us by the end of September.

P I C A R I Æ.

CYPSELIDÆ.

SWIFT.

Cypselus apus.

THE Swift arrives about the 4th of May, when it congregates around the highest buildings of our towns, or the towers of our village churches.

In fine weather it seems to pass the greater part of its existence in careering about high in the air, for it is never seen to alight on the ground or to settle on trees or buildings, and, except in the breeding-season, seems never to rest. At this time Swifts may be seen dashing about, pursuing one another with rapid flight, and screaming loudly. They are particularly active during thunder-storms; in very rough winds or cloudy days, however, they may be observed to fly much lower, and when they have young will descend nearly to the ground, or fly over the water, capturing dragonflies and other insects, especially minute *Coleoptera*. In the breeding-season they betake themselves to the caves of some lofty building, where they place, generally on the wall-plate, an artless nest of hay or straw, lined with feathers, and at the time of incubation the females are serenaded by the loud cries of their partners as they dash around the building. They will sometimes, however, take possession of similar situations under the roofs of low cottages, returning to them for many years in succession. I once observed a pair of

these birds flying to and fro under a bridge, only a few inches above the level of the surrounding fields, and, as the water was low, I managed to get under it, and there found, on the piece of timber supporting one end of the planks of the bridge, a nest containing two eggs. On another occasion, I found several birds sitting on their nests on the wall-plate under the eaves of a church, and took them off to see how many eggs they had, placing the old birds by the side of the nest, when they made no effort to move, and I put them back and left them. As I have said before, the Swift is never voluntarily on the ground, and, when placed on a level surface, rises from it with great difficulty. It is infested by great numbers of a species of *Hippobosca*. It leaves us early in August, but I have once seen it as late as the 14th of September.

ALPINE SWIFT.

Cypselus melba.

THIS rare straggler is larger than *C. apus*, measuring 18 inches in extent of wing. Its habits are very similar. In Switzerland, the only place where I ever saw it alive was about the Cathedral in Berne, whither I went for the purpose, and well was I rewarded! for it was a beautiful day, and I saw great numbers of this magnificent Swift careering around, and far above, the spire. I was not so successful, however, in procuring the egg, in hope of which I ascended the interior of the spire, for the only nest I found, but did not see, was in a hole which I thought I could reach from a small opening at the highest accessible point. By leaning out as far as possible, I could just touch an egg with the tips of my fingers, but durst not reach out an inch further, the

mullion on which I was leaning showing signs of considerable weakness. I wetted my fingers and made some mud from a dirty beam, hoping an egg might adhere to them, but with no avail, as it was not sticky enough, and I was obliged to give up the attempt, having no desire to make so rapid a descent as I might have done. What would I not have given for a bottle of gum, or a teaspoon! but there was no time to go down and return, as I was compelled to leave by a particular train. This was in August 1869. The nest is thus described in Yarrell's 'British Birds,' vol. ii. p. 375 :—"The nest is placed in holes of rocks or buildings, and is described as being small, for the size of the bird; semicircular when placed against a vertical surface, and formed of straws, grasses, and leaves, with moss, or almost any other material it can collect on the wing, the whole being glued together with its saliva."

The only specimen which, as far as I am aware, has occurred in Sussex, was seen sitting on a rail at St. Leonards-on-Sea early in October 1851, and was knocked down by a boy. It passed into the possession of Mr. Johnson, chemist, of that place (Zoologist, p. 3330).

CAPRIMULGIDÆ.

NIGHTJAR.

Caprimulgus europæus.

THE Nightjar, Fern Owl, or Goatsucker, is migratory, appearing about the middle of May, and leaving the country towards the middle of September. It is found in all the wooded districts, as well as on the open Downs and heaths.

It feeds generally by night, on *Coleoptera*, especially the chafer, and on the night-flying moths. Gilbert White says that, while watching one of these birds pursuing chafers, he saw that it conveyed something to its mouth with its foot, and that he supposes the serration of the middle claw to be useful to the bird in holding its prey; and in Yarrell's 'British Birds' is mentioned the suggestion of Mr. Sterland, that it may be an assistance to it in maintaining its hold on the branch of a tree in the horizontal position which, when it settles, it always assumes. It is, however, doubtful whether it is designed for this purpose, or what its true function is. Although, as I have said, it mostly feeds by night, I have several times seen it in the brightest sunshine, lying on the top of a bee-hive, swooping every minute or two at the bees, and have known it so engaged for many hours at a time, and it is often shot while thus destructively employed.

So far from avoiding the sunshine, it seems to delight in it, and I have often seen it knocked on the head by the all-destroying keeper.

My son, going about one night with a lantern, collecting moths on sugar, observed one thus stretched out on the top of a post, and, turning his lantern on it, the bird was so dazed by the light that it allowed itself to be stroked down the back. Its note exactly resembles the sound of a spinning wheel, and the "Spinning Wheel Copse" has from time immemorial been the name of a small wood in a neighbouring parish, which is more resorted to by Nightjars than any spot with which I am acquainted. It has another note, resembling that caused by the passage of a whip through the air. It has extraordinary powers of flight, twisting and wheeling about in all directions.

It lays its eggs, making no nest, on the ground, in an open space in a wood, and seems fond of placing them among the

chips left by the hoop-shavers, where I have often found them. When startled while sitting, it strikes its wings violently together in the manner of the Pouter and some other Pigeons, though its usual flight is inaudible. This has hitherto been considered the only representative in this country of the *Caprimulgidae*, but a single specimen of the *C. ægyptius* has been obtained in Nottinghamshire; and an example of the large South-European species, *C. ruficollis*, is said to have been taken in Northumberland, in October 1856 (*Ibis*, 1862, p. 39).

CUCULIDÆ.

CUCKOO.

Cuculus canorus.

HAVING kept notes of the arrival of the Cuckoo in this county for more than thirty years, I find the earliest to have occurred on the 6th of April 1844, but about the 14th is the more usual date. There is a saying in Sussex that it is turned out at Heathfield Fair, which is held on that day—the name of this village is rustically pronounced Hévéel. Although the Cuckoo is not strictly polygamous, seven or eight may occasionally be seen chasing one another from tree to tree, and at this time another syllable is prefixed to the usual note, thus: “Cu-cuckoo,” generally twice repeated at short intervals. It has besides a clear, liquid note, which I cannot express in writing, and it also chatters, on leaving a tree, somewhat in the manner of the Magpie. It is frequently heard at night even when it is wet and dark. On the 9th of May 1846, I heard two uttering the note with the prefix,

for nearly a quarter of an hour. The Cuckoo feeds on moths, dragonflies, and hairy caterpillars. I believe few birds will eat the larva of the sawfly of the gooseberry, but I once saw five Cuckoos together in my garden busily thus engaged. These birds are perfectly harmless, yet the keepers constantly kill them, no doubt mistaking them for Hawks. There has been great discussion as to how the bird contrives to place its egg in the nest, which is often so built, or situated, that it would be impossible for it to adopt the usual method; it is, however, now indisputably settled that it conveys it in its mouth. Formerly, when a Cuckoo was shot while on this errand, the broken egg in its mouth caused it to be suspected of robbing other birds' nests. According to the nursery rhyme, "It sucks little birds' eggs to make it sing clear." I have occasionally found the Cuckoo's egg in the nest of the Chaffinch and Greenfinch, and in that of the Pied Wagtail; but those of the Hedge-Sparrow, the Robin, the various Pipits, and the Reed-Warbler, seem to be usually preferred. The Cuckoo has generally left us by the end of July, though an occasional bird, usually young, may be observed late in September.

It is generally diffused all over the county, but prefers open heaths, especially those where there are scattered timber trees. It is also partial to marshy land. When uttering its note, it usually sits horizontally on a bough. Its mode of flight, and its general appearance, are so much like those of a Hawk that it is much persecuted by small birds, for which they, like the gamekeeper, no doubt mistake it, and, perhaps for that reason, it is very shy and retiring. In the numerous eggs which I have seen, there has been very little variation in colour, some being slightly redder than others. I took one, at Cowfold, from a Hedge-Sparrow's nest, which was as large as that of the Alpine Accentor, and of the same colour as that of the Hedge-Sparrow, of which

I at first thought it a double-yolked specimen, which it was not, and several naturalists agree with me that it is that of a Cuckoo.

UPUPIDÆ.

HOOPOE.

Upupa epops.

This species makes its appearance almost every spring, principally in April, and again pays us an autumnal visit. Its occurrences are too numerous to need individual notice, and it has in very few instances bred in the county. The earliest on record, that I am aware of, was at Southwick, near Shoreham, where a pair hatched their young in a hole in an ash-tree on the village green. They were for some time in the possession of Mr. Waring Kidd, of Brighton. I visited the spot, and examined the remains of the nest, which was on a bed of rotten wood, quite soaked with a most horribly odorous mass of putrid matter. In another instance, a pair hatched their young in a tree at Park End, Chichester, about the year 1835, as is recorded by Mr. Jesse in his 'Gleanings' (vol. iii. p. 148).

I saw an example of this bird on my lawn, on the 14th of April 1882, and watched it for some time searching for food among the grass, using its bill as a man would a pickaxe, which instrument, supposing the head and neck to form the handle, and the bill and folded crest the rest of the tool, was thereby not badly represented. I did not hear it utter any note, nor did I see it erect its crest. When disturbed, its flight greatly resembled that of the Jay, but was more buoyant.

I was told afterwards that either this or another Hoopoe was seen running about in an adjoining meadow, on the 29th of the same month. It is a very filthy feeder, delighting in searching in noisome manure heaps for grubs or beetles, for which it also frequents willows and other trees, probing the perforations made by these insects, it also feeds on earth-worms, often running round in circles, trampling down the grass to bring them to the surface.

When I was quite a boy, I made my first acquaintance with the Hoopoe in this way: I was at a farmhouse when the tenant brought in a Hoopoe, which he had just shot in a wood close by. His wife said, "It is a pretty bird and ought to be kept;" to whom he replied, "Hang it up in the chimney by the side of the bacon," which was accordingly done. Many years after I saw it again, and was told that it had just been brushed over with a hat-brush. It was still in fair condition, though rather spoilt by the smoke.

CORACIIDÆ.

ROLLER.

Coracias garrulus.

THIS very rare visitor has made its appearance in Sussex, but the notices are few and far between. From Yarrell's 'British Birds' we learn that, in the countries of which it is a native, it frequents the woods and is very shy, and is generally seen passing from one dead tree to another in search of *Coleoptera*, uttering in its flight a loud cry resembling the words "Rack-rack-rack." It also feeds on frogs.

The nest is commonly placed in a hollow tree, occasionally

in a hole in a bank, or wall, using a bedding of roots and grass, or feathers and hair, on which it places the eggs. It has obtained its name from a habit of rolling over in its flight.

The earliest record of this species in Sussex is that of Hill (Hist. Anim. p. 369), who states that one was seen by him in Charlton Forest in 1752. Markwick, in his Catalogue of Sussex Birds, read before the Linnean Society (1795), merely says, "A bird of this species was killed in this neighbourhood." Mr. Knox records an example shot by Mr. Tomsett, near Alfriston, and another shot in July 1843, on Clinton Farm, near Cuckmerhaven. In the 'Zoologist' (p. 2497) there is a notice of a specimen shot on the 29th of May, near Nutley, on the borders of Ashdown Forest, which proved on dissection to be a male, and a cockchafer, with the remains of other large *Coleoptera*, was found in its stomach. I am informed by Mr. Dunlop, Vicar of Henfield, that this specimen is now in the possession of Mrs. Day, of Uckfield House, and was shot by Mr. John Bennet, for whom Mr. May, naturalist, of East Grinstead, informs me that he mounted it. Mr. Monk has recorded a Roller which was killed at Isfield, on June 12th, 1870, and purchased by Mr. McQueen, of Chailey, who presented it to him. On dissection, the only thing found in its stomach was a small cockchafer (Zoologist, p. 2224).

MEROPIDÆ.

BEE-EATER.

Merops apiaster.

I HAVE only heard of three instances of the occurrence of this species in Sussex. The first was shot by Sergeant

Carter, near Chichester, in May 1829, and is mentioned by Mr. Knox (O. R. p. 219). The second, which does not seem to have been recorded in any journal, is thus mentioned in a note to the 'Catalogue of British Birds,' sold at Godalming in March 1890:—"This rare bird was obtained from a person who found it on the sea-shore between Arundel and Worthing in 1833." The third was shot at Icklesham in August 1834, but not recorded in the 'Zoologist' till 1850 (p. 2953). It was mounted by Mr. Martin, of Hastings, and purchased by Mr. Ellman, from whom it passed into my collection.

The Bee-eater frequents the South of Europe, and breeds, often in large numbers together, in holes in banks, or sand-hills, excavating them to the depth of three or four feet, enlarging them into a chamber of about a foot in diameter, and lays on the bare soil. The legs and wing-cases of the insects on which it feeds, which are the castings of the bird, accumulate in such quantities that a handful may be taken up at once. It feeds on humble-bees, wasps, grasshoppers, and many kinds of beetles. Its flight resembles that of the Swallow, and its note has been described as a rich warbling chirp. (See Yarrell's 'British Birds,' vol. ii. pp. 421-2.)

ALCEDINIDÆ.

KINGFISHER.

Alcedo ispida.

THOUGH rather local, the Kingfisher is found throughout the county, following the courses of the streams and haunting the large ponds of the forest and Weald, visiting as well the

small pits which are scattered about the county. Its flight is exceedingly rapid. It feeds principally on small fresh-water fish, for which it may often be seen watching, perched on an overhanging bough, and is then very confiding. I have known it to sit for some time on a fishing-rod stuck into a bank close to me; on perceiving a fish, it will dash down and seize it, generally by the middle, and either carry it off, or swallow it head first.

It often hovers over the water for a few seconds before descending on the fish. It is partial to little drains in the salt-marshes near the sea, where it follows the ebbing tides, and pounces on the small *Crustacea* which it finds there. I have now and then seen it in Shoreham Harbour, or flying across the beach between that and the sea. It also feeds on water-beetles, dragonflies, and other insects. Occasionally, it appropriates the deserted hole of a water-rat, from one of which I dug a nest, close to the Hammer Pond, near Horsham, sometimes very little above the surface of the water, but more commonly it excavates one itself in a bank, sometimes in a dry sand-pit, and only large enough to admit itself, and from two, to five or six, feet deep, sloping upwards, and terminating in a small chamber. There it forms a cup-shaped nest of its own castings of fish-bones, which smell abominably; the passage to the nest being always, after the hatching of the young, flowing with putrid matter, and swarming with fleas. The note is shrill and piping, uttered as it follows the windings of the stream, or flies up and down a pond. The young assemble on a branch overhanging the water, while waiting for their food, and they then keep up a shrill twittering. In confinement, the Kingfisher is very pugnacious. The feathers are in great request for making artificial flies, and, from the brilliancy of its plumage, it is a favourite ornament in the head-dresses of the ladies, whence its numbers are rapidly diminishing. In some of the Sussex farmhouses

one of these birds may be seen suspended by a string from the ceiling, the idea being that the bill always points in the direction of the wind.

PICIDÆ.

GREEN WOODPECKER.

Geococcyx viridis.

THIS, the largest and commonest of the British species, is found wherever there is old timber, frequenting the outer edges of the woods and the open glades, rather than the thicker portions, as well as the scattered trees of our parks. It climbs with great facility, and diligently searches the crevices in the bark of the trunk and the large limbs. It bores a truly circular hole, deep into the timber, in which it lays its eggs on the rotten wood and those chips which are not thrown out, forming no other nest.

Notwithstanding its large size and its powerful bill, it is often dispossessed by the Starling. In the summer it may frequently be seen on the ground, probing with its long tongue the nests of the ants; its motions then resemble those of a Parrot. I have several times watched both the old birds and their young thus employed. Its flight is undulating, and in passing from tree to tree it utters a loud laughing cry, in some degree like the neighing of a horse, and on this account it has acquired the name of "Yaffil." It is also, from its uttering it most frequently in stormy weather, known as the "Rain Bird." It is very harmless, seldom attacking the sounder parts of the wood. When perforating the tree, its tail may be observed to be constantly twisting round and round, as if polishing the surface of the wood.

GREATER SPOTTED WOODPECKER.

Dendrocopus major.

THIS species is not nearly so abundant as the last, but may be met with occasionally where there are pollard trees, particularly the willow and alder, not affecting the large timber so much as *G. viridis*. It is fond of fruit as well as of nuts, beech-mast, and other seeds. Insects, however, are its principal food, and for them it may be heard constantly striking the higher branches, to which it chiefly confines itself. It bores holes about two inches in diameter, sometimes to a great depth, and, if the tree is suitable, it may be found regularly riddled with them, and the ground strewn with the chips.

It has several distinct notes, and is very vociferous in the spring. It usually forms its nesting-place in a hole of its own making, but occasionally uses any suitable hollow, laying its eggs on the decayed wood and chips.

It receives an accession from abroad in December. Of this, a remarkable instance occurred in the neighbourhood of Brighton in that month of 1889, when the visitors even entered the gardens in the town, and were found in many parts of the Weald, not usually frequented by them. I am not aware that it has any local name.

LESSER SPOTTED WOODPECKER.

Dendrocopus minor.

FROM its very small size, and from its predilection, except in the breeding-season, for lofty trees, especially the elm, this bird, though more generally diffused than *D. major*, is much

more rarely seen, and, were it not for the constant jarring of the bill against the branches, might altogether escape notice. In the breeding-season, although it probably nests in the higher parts of trees as well, it occasionally makes its hole quite low down in a fruit-tree, and sometimes close to a dwelling, and this, as might be expected, is very small, little exceeding an inch and a quarter in diameter. Its food consists entirely of insects, and I have never seen it on the ground. It has a loud note, resembling *kink, kink*, often repeated, as it sits upright on the topmost shoot of a tree. It does not seem to have any local name in this county.

WRYNECK.

Iynx torquilla.

ARRIVING in April a little before the Cuckoo, the Wryneck has obtained the name of the "Cuckoo's Mate," and its note, much resembling that of the Kestrel, is one of the earliest to be heard. It is also called in Sussex the "Peel Bird" or "Rinding Bird," from its giving notice that it is time to commence the flaying of the oak bark. It has acquired the name of Wryneck, from the peculiar habit of sunning itself on the point of a branch, and contorting its neck in an extraordinary manner, pointing its bill straight up, and ruffling up its feathers. It feeds entirely on insects, and, like the Green Woodpecker, is fond of collecting the ants and their eggs, by means of the adhesive secretion on its tongue. It never makes any nest, but lays its eggs on the rotten wood in a natural hole, frequently in some fruit-tree. In one instance a friend of mine amused himself by taking one egg every morning till he had obtained no less than twenty-two*.

* It is curious that the same number was taken by Mr. Salmon (vide Mag. Nat. Hist. vii. pp. 465, 466).

Though a weak and defenceless bird, it is very tenacious of its abode, repelling any attack on it with a loud, snake-like hissing, and from this, and from the contortions of its neck, it has acquired the further title of the "Snake-bird." Its flight is not undulating, but straight, like that of the Finches. Although the feet are formed like those of the Woodpecker, it is seldom seen to climb, and the feathers of the tail are soft and flexible.

C O L U M B Æ.

COLUMBIDÆ.

RING-DOVE.

Columba palumbus.

THE Ring-Dove is generally known as the Wood-Pigeon, and is very common, and strictly monogamous. It inhabits the woods, but in the breeding-season often comes into gardens, and is then very tame, walking about on lawns close to houses. One has often come within a few feet of me when I have been sitting perfectly quiet, though at other times it is very wild, watchful, and difficult to get a shot at. It builds a mere platform of small sticks, so slightly put together that the eggs may sometimes be seen from below.

It breeds very early, and very late. I have shot young birds in October that could merely fly from tree to tree. The usual site of the nest is in thick ivy on the trunk of a tree, but I have in two instances observed it in ivy against a house. It often nests in a thick fir, particularly spruce.

The note is well described in Yarrell's 'British Birds' by

the syllables “coo-roo-cōō-cōō,” laying great stress on the second.

It is fond of gooseberries, but its usual food is beech-mast, acorns, and corn, as well as turnips, to which it does great harm by scooping out the pulp, leaving large holes, thus admitting the water, and causing the roots to decay. It eats the seeds of many noxious weeds, particularly those of the kelk, or charlock (*Sinapis arvensis*), and is very fond of those of the buttercup (*Ranunculus acris*), as well as of the berries of the holly and the yew.

In the breeding-season it has a peculiarly buoyant flight, rising and falling in the air in a series of arcs.

STOCK-DOVE.

Columba ænas.

THE name Stock-Dove has been supposed to be derived from the mistaken idea that this species is the origin of the domestic pigeon, which however is not the case, but it has been given to this bird from its breeding, not in the *branches*, but in the *stock* of a tree, placing its nest, composed of sticks, in holes of large timber, especially of the beech. It breeds in those of St. Leonards Forest, one of which I found tenanted by the Brown Owl in the middle, the Stock-Dove higher up, and the Jackdaw highest of all. I have also known it to build in Spanish chestnut, pollard oak, and fir trees, in the Parks of Petworth, West Grinstead, Parham, and Stanmer, also among the ivy on a tree at Barrow Hill, Henfield. A pair bred for several years in a thick mass of it on my own house at Cowfold, and thence, on the ivy dying away, they removed to that on an oak tree about a hundred yards off. A pair also have long bred just below a window

in front of the house at Oakendean, in the same parish, as well as in holes in the elms of the rookery there, and in some ash pollards near the house. Its food is similar to that of the Ring-Dove. Gilbert White says that it is particularly partial to barley.

Mr. Booth, in his 'Rough Notes,' states that he found young Stock-Doves in a Squirrel's drey, in Balcombe Forest, and that they resort to rabbit burrows in the slopes of the South Downs, and to holes in the face of the chalk pits of Beeding and Offham. Mr. Jeffery, in his P. N., says that it breeds in Stoke Park, and in the old yew trees at Kingly Vale.

It is of late years much more diffused over the county than formerly, assembling in large flocks in the winter. It does not coo, but utters a prolonged rumbling sound.

Mr. J. H. Gurney, in Transactions of the Norfolk and Norwich Naturalists' Society, vol. iii. p. 172, says:—"The Stock-Dove breeds in the cliffs of Fairlight. I was sure of this in 1879, having frequently seen Pigeons fly out of the cliffs, but could never be certain if they were Stock-Doves or Tame Pigeons; but this year I saw them near enough to be quite certain about them, and should say that there were three or four pair nesting between the Glen of Ecclesbourne and the Glen of Fairlight. At Hurstmonceaux Castle, where they also breed, and where there is a large garden, I am told they do great harm to the young cabbages."

ROCK-DOVE.

Columba livia.

I DOUBT whether the Rock-Dove ever breeds in Sussex, the deep caves agreeable to its habits not existing in our cliffs.

It has been obtained very rarely. I can only give the following instances :—Mr. Ellman informed me that one was shot by Mr. Vidler, near Pevensy, in February 1852. Mr. Dutton records another shot near Bell Tout Lighthouse, in January 1865, and a third at Holywell, near Hastings ('Zoologist,' p. 9578). I found them abundant on the coast of co. Mayo, and had an opportunity of observing the marvellous rapidity of their flight when dashing out of the caves in the rocks of that iron-bound coast. This species is considered to be the progenitor of the domestic Pigeon.

TURTLE-DOVE.

Turtur communis.

THIS beautiful Dove is migratory, appearing in May and leaving us early in October. It breeds in the underwoods of our copses and shaws, and lays its eggs on a platform of small sticks so loosely constructed that they may often be seen through it, and seldom at any great height from the ground. It is very fond of salt, and may often be observed in little flocks on the salt-marshes. Feeding on corn, it after the harvest frequents the stubbles, and is especially fond of tares. Its note may be expressed by the syllables "cür cür." Its flight is very rapid. On its first arrival seven or eight may occasionally be seen together, and they assemble in the latter part of September in still larger numbers, a few days before they take their departure.

PEDIOPHILI.**PTEROCLIDÆ.****PALLAS'S SAND-GROUSE.***Syrnhaptes paradoxus.*

THIS straggler from the Steppes of Asia made its first appearance in Britain, on the coast of Norfolk, in July 1859; the great invasion, however, did not take place till 1863, and the Sand-Grouse did not arrive in Sussex till that year, though one was killed so near as New Romney in Kent in November 1859 (Ibis, 1864, p. 186). The flight is extremely swift, and the note is described as resembling the words "truck-truck, truck-truck"; the food consists of small seeds and berries. Mr. Parkin, of Halton, Hastings, in his P. N., says that a specimen was caught in the parish of Icklesham, at the Camber Sandbanks, in July 1863, by a son of Lieut. Webb, of the Coastguard, and was stuffed by Mr. Gasson, of Rye. I was informed by Mr. Pratt, of Brighton, that a flock of about thirty were seen for some days in June 1888, flying to and fro from the Downs to the beach; they were very wild, and no one could get within shot of them. He also said that on June 20th two were shot near Falmer, and a solitary bird on the beach at Shoreham on the 8th of November; all these examples were sent to him for preservation. Mr. Jeffery tells me that a Sand-Grouse was obtained at Itchenor, near Chichester, in February 1889. In the 'Zoologist' (p. 8682) we read of a specimen having been shot by Mr. Pickard, of Woodward Farm, Balcombe, in June 1863, from the crop of which a spoonful of small seeds was taken; and of another, supposed to be a female, shot out of a flock of seven or eight

near Eastbourne. (Recorded in the 'Field' by Mr. C. S. White, but without date.) On p. 8683 it is mentioned that a specimen was killed by coming in contact with the telegraph-wire on August 29th, and was purchased by Mr. Vidler, of Pevensy. It was a female, and its crop contained a little of a peculiar grass which grows by the salt water "*pells*," i. e. small pools, no doubt derived from the Latin *palus*. It afterwards came into my possession. Mr. Vidler had seen a party of eight, dusting in the road, a few days previously, but they disappeared before he could get his gun.

The eggs of this bird were brought to Professor Newton by Mr. Bateson, who found them on the Kirgiz Steppes, where he saw many nests, which were chiefly placed in hoof-prints.

GALLINÆ.

TETRAONIDÆ.

BLACK GROUSE.

Tetrao tetrix.

THE Black Cock and Grey Hen, which were formerly found in scattered parties in the Forest Districts of Sussex, are, I fear, now nearly extinct.

In the Forest of St. Leonards none have been heard of for the last forty years, though, from Mr. Padwick, of Horsham, I learn that his father once shot five or six brace in a morning, in a part of the forest known as Coombe Bottom, between 1835 and 1840. I myself shot an old Black Cock in Lower Beeding parish about 1849; it was alone, and had been observed for some time.

It is very possible that birds might have strayed over the Sussex border from Wolmer Forest, where their numbers have been replenished since the time of Gilbert White by Sir Charles Taylor, when he was the Ranger of the forest*. More likely still, from Leith Hill in Surrey, where, about 1832, I saw as many as twenty old cocks in a pack, and have often put them up in smaller numbers. In Ashdown Forest, they seem to have lingered somewhat later, as, from inquiries made in that district, I learn that two or three pairs were seen up to about 1862 near Duddleswell and Pippinford, almost the highest part of that range. In that same year, 1862, Mr. Turner, then Rector of Maresfield, wrote as follows:—"Ashdown Forest was well stocked with Black Game. So numerous were these birds at the commencement of the present century, that it was hardly possible to walk or ride in any direction without disturbing some of them. At that time the forest was thickly covered with heath, but this has been so generally cleared that the Black Game, being deprived of the food and shelter they so much delight in, have gradually disappeared" (*vide* 'Sussex Archaeological Collections,' vol. xiv. p. 62). Markwick merely states that he has seen this species in St. Leonards Forest, near Horsham. Mr. Knox, in O. R. p. 164, mentions having seen a few near Crawley, but that they were fast decreasing in numbers.

In the 'Zoologist,' p. 3330, Mr. Ellman records that a Grey Hen was caught in a wire by one of the "slippery gentlemen rovers of the night," and the cock bird seen, about five miles from Lewes, October 30th, 1851.

The Black Grouse feeds on corn, heath, whortleberries, and blackberries, and, in severe weather, on buds of the willow and birch, and the tips of the fir. It makes a slight nest

* There is no reason to suppose that they were extinct in the time of Gilbert White.

generally on a bank, under shelter of a tuft of heath or small bush. Its favourite resorts were the most boggy parts of the forest, and it seemed to require a good supply of water.

Mr. Stewart Hodgson, of Lythe House, Haslemere, writing in May 1890, informs me that he had not seen any Black Game on Black Down, which is in Sussex, except an old cock, which he killed in the winter of 1870, for several years. He kindly sent me a letter dated May 15th, 1890, from Mr. James Simmons, of Haslemere, in which he states that a brace were put up on Black Down this last season by the hounds, and that they were the last he had seen. Mr. Hodgson informs me also that many years since, Sir Charles Taylor, then of Hollycombe, had a number of Black Grouse from Scotland turned out, but they got away to the highest part of Hind Head, that they lived some years, seeming healthy, but never breeding, and that he also remembers that Mr. James Fielding turned a number out on Black Down in 1840 with the same result. They have been of late years much disturbed by the military. Mr. Allen Chandler, of Churt Wynd, Farnham, states that he last saw Black Game on Black Down about ten years ago.

P H A S I A N I D Æ.

PHEASANT.

Phasianus colchicus.

THERE is an ancient tradition that the Pheasant was originally introduced into Greece by the Argonauts, on their return from their expedition in search of the Golden Fleece, whence it gradually spread over Europe, and there is reason to suppose that it was introduced into England by the Romans.

It is now so crossed with the Chinese Ring-necked species (*P. torquatus*) that it is extremely difficult to obtain a specimen of the pure Colchican bird. That it was here before the Norman Conquest appears certain, and the earliest record may be found in the tract ‘De inventione Sanctæ Crucis Nostre in Monte Acuto et de ductione ejusdem apud Waltham,’ edited from a MS. in the British Museum by Bishop Stubbs, and published in 1861. The bill of fare drawn up by Harold for the Canons’ households of from six to seven persons, A.D. 1059, and preserved in a MS. of the date of circa 1177, was as follows:—“Erant autem tales pitantiæ unicuique canonico : a festo Sancti Michaelis, usque ad caput jejunii (Ash Wednesday), aut xii merukæ, aut ii aganseæ [Agace, a magpie (?) *Ducange*], aut ii perdices, aut unus phasianus, reliquis temporibus aut anæ [Geese; *Ducange*], aut gallinæ.” Which may be thus translated:—Such were the allowances to each Canon from Michaelmas day to the beginning of the fast, Ash Wednesday : either twelve blackbirds, or two magpies, or two partridges, or one pheasant, at other times either geese or fowls. “Now the point of this passage is that it shows that *Phasianus colchicus* had become naturalized in England before the Norman invasion ; and as the English and Danes were not the introducers of strange animals in any well authenticated case, it offers fair presumptive evidence that it was introduced by the Roman conquerors, who naturalized the Fallow Deer in Britain.” See Professor Boyd Dawkins, ‘Ibis’ 1869, p. 358.

The first mention of the Pheasant, after the Conquest, may be found in Dugdale’s ‘Monasticon Anglicanum.’ In the first year of Henry I., A.D. 1100, “The Abbot of Amesbury obtained a licence to kill Pheasants.” In Mr. Dresser’s ‘Birds of Europe’ (vol. vii. p. 87) it is stated that in the time of Edward I. Pheasants were sold at 8*d.* a brace.

The earliest mention I have met with of Pheasants in

Sussex is, that in 1245 the Custos of the Bishopric of Chichester was ordered to send to the King for his use at Easter among other game, twenty-four Pheasants (see Sussex Archaeological Collections, vol. xvii. p. 118). There are now many large preserves in the county, and Pheasants are spread over it in all suitable places. As a rule they roost in high trees, but if disturbed they will not rise from the ground again the same night, concealing themselves under some thick bush till morning.

A clap of thunder, or any violent explosion, will cause all cock Pheasants within hearing to crow. They are polygamous, and their usual nesting-place is on the ground, though, in a few instances, they have been known to take to the deserted nest of a crow, or the drey of a squirrel.

They will, not unfrequently, breed with the Domestic Fowl, and when the Black Grouse was to be found in Sussex, there have been a few instances of their crossing with it. The hen Pheasant has been often found to lay its eggs in the nest of the Partridge.

In the nuptial season the cocks fight desperately, so much so that I once witnessed a fierce and prolonged combat, which resulted in the death of one, and the retirement of the other in a very dilapidated state; the former I picked up and carried home.

The Pheasant feeds on insects and their larvæ, particularly on the wire-worm, and on corn, peas, and acorns. It also digs up and eats the roots of many plants, and, in gardens, is very destructive to tulips and crocuses. Numerous berries also form a large portion of its diet. It is very fond of the fruit of the snowberry, *Symphoria racemosa*, and of that of the *Berberis acutifolia*, and much appreciates salt. It is subject to great variation of plumage, white and pied birds being often met with. The variety called Bohemian is found in a few preserves.

COMMON PARTRIDGE.

Perdix cinerea.

THE Partridge is very common, and is too generally known to require much notice. It is indigenous, and pairs for the season in February. The nest is formed of grass, placed in any depression of the ground, in rough hedgerows, or open fields of corn or long grass. It sits very close, and when the young are hatched the hen is very anxious for their safety, fluttering about as if wounded, but always in so artful a manner as to be able to escape as soon as the pursuer has been enticed away from her brood, and they have had time to disperse in all directions. There may occasionally be found a whole covey in which the horse-shoe mark on the breast is white, instead of chestnut; and I once met with a covey of eight, every bird of which was of a light fawn colour, with very slight rudiments of the horse-shoe mark, and shot a brace of them, which I still have.

Should there be a strong breeze from the north, the sportsman on the coast refrains from shooting, the Partridges being liable to fly out to sea, where, in several instances, a whole covey has been picked up by the fishermen.

I quote the following:—"While walking on the Marine Parade at Brighton on Friday last, about two o'clock, I was surprised to see a small covey of Partridges dash across the esplanade, coming apparently from the direction of the sea, and seemingly quite bewildered, and take refuge in the areas of the houses on the Parade. Some workmen close by lost no time in securing them alive. It appears to me that the birds must have made an amazingly long flight to have come into such a central part of the town. I never saw such a thing before." ('Field,' Oct. 22, 1880.)

During the Brighton Volunteer Review, Partridges, alarmed by the movements of the troops, have flown out to sea and alighted on the water, being picked up by fishermen in their boats. ('Field,' December 23, 1882.)

RED-LEGGED PARTRIDGE.

Caccabis rufa.

THIS bird, generally known in Sussex as the French Partridge, is said to have been introduced into England about 1770, but was very rare in this county, a few being now and then met with on the Downs, which were considered by sportsmen to have immigrated from the Continent.* For a long time they did not spread to the Weald.

Mr. Knox mentions that two coveys were hatched and reared under domestic Hens, and turned down at Kirdford, near Petworth, in July 1841, which suddenly disappeared (O. R. p. 169). In September of the same year a covey of five were found at Bolney, a brace of which were shot and sent to me, by Mr. Marshall, of that place. Since that year they have rapidly spread over the whole of the Weald, and are considered a nuisance by sportsmen, as they spoil the dogs by running long distances, and then getting up out of shot. The flesh is not much esteemed for the table. They, however, offer excellent sport when driven by a large party of beaters. They nest in similar situations to those chosen by the common species, using the same materials. Their

* I have heard that a number of these birds were turned out by one of the Curzons of Parham, on the South Downs, many years ago, but I cannot ascertain the date. It is very improbable that they migrated from the North of France, as the species is hardly to be found there.

call-note resembles the sharpening of a scythe—"chuck, chuck, chucker-chucker." The Grey Partridge says "kerchup, kerchup, kerchup."

There is a remarkable difference in the habit of the two species. If a pair of Grey Partridges be made to run, they will always keep together, but a pair of Frenchmen, under similar circumstances, will always separate.

QUAIL.

Coturnix communis.

THIS little bird was formerly considered a spring-immigrant only, but as there have been many instances of its occurrence in the winter months, that idea must now be abandoned. Its principal haunts are the South Downs, where the nest is still occasionally found, but not so abundantly as formerly, when beevies of them were often met with in the corn-fields and turnips, both on the Downs and in those immediately adjoining them. It occurs but rarely in the heart of the Weald, and then in September and October. When put up it flies close to the ground, and if missed by the sportsman it is exceedingly difficult to flush it a second time. Its flight is then exceedingly rapid, and in a straight line; but it seldom flies to any great distance. It is partial also to wet and rushy marsh-land, and runs very swiftly. The call-note ("wet-my-lips") is soft and dactylic, whence one of its specific names was *dactylisonans*. It may be heard to a considerable distance. Its nest is on the ground, and in the few instances in which it has been found on the Weald it has been in fields of wheat, clover, or grass put up for hay. Many years ago my father-in-law turned down several dozen on a farm

not far from the Downs, but never after fell in with one of them. The males are exceedingly pugnacious, and were by our ancestors much prized for exhibition in the Cock-pit. The Quail is largely imported from the Continent, for the table. It feeds on slugs and small seeds, and when properly fed becomes exceedingly fat. Mr. Jeffery, in his P. N., mentions a Quail killed at Selsey on the 1st of November, 1863, and another near Chichester on the 1st of February, 1866.

FULICARIÆ.

RALLIDÆ.

LANDRAIL.

Crex pratensis.

THE Landrail, or Corn Crane, arrives in April, or early in May, when its note, which may be imitated by drawing the fingers rapidly over the teeth of a comb, may be heard in the meadows and fields of corn and of clover, for which latter it has a peculiar liking, probably because *Helix aspersa* abounds there. I have frequently found broken shells of this species, and occasionally a whole one, in the gizzard. The nest is a mere depression in the ground, lined with dry herbage.

In September this species is usually met with singly or in pairs, and when flushed it is very difficult to make it rise a second time. Should it get to a hedge it will often, when pressed by a dog, climb up into the bushes. I once happened to see a Landrail close to my foot, in some thick grass, and it allowed me to pick it up, and, to my surprise, appeared

perfectly dead, though I could not see the slightest appearance of its having been injured, and it was quite warm. I held it by the legs, and, on swinging it about, the neck was perfectly limp, and its eyes were closed. I then put it on its back on my hand, and it remained motionless. I laid it down on a foot-path and watched it for some five minutes, when I saw it open one of its eyes, and almost immediately it ran into the long grass, and, though the dog tried for it a long time, I never saw it again. Since that, I found a notice of a Land-rail behaving in exactly the same way, in the 'Zoologist' (p. 218 s. s.). Late in September they flock together for emigration. A brother sportsman, and I, once shot four brace and a half, in one clover field, and saw several more, but, the clover being very wet, the dogs could not hunt them, and they would not rise. I have known several instances in April, of their having been caught in the gardens of Brighton, and I remember one being picked up on the Chain Pier. Mr. Ellman records in 'Zoologist' (p. 2419) that one was shot, and another seen, near the coast just before Christmas 1849, and a third was seen on the Downs near Eastbourne by Mr. Clark Kennedy in November.

SPOTTED CRAKE.

Porzana maruetta.

THE Spotted Crake arrives in March, and as a rule leaves us in October, but it has now and then been met with in the winter. I shot one myself on Henfield Common in December 1845. It is considered rather a rare bird; though, from its skulking habits, requiring a good dog to flush it, I imagine

it to be more common than is supposed. I have often found it, when Snipe-shooting, on Henfield Common, especially in October, though I have never met with, or heard of, the nest in Sussex.

I have often shot the adult bird in the county, and on two occasions, in September, obtained an immature example on the aforesaid Common. It principally resorts to wet and boggy places, where it conceals itself among the thickest herbage, and feeds on mollusks, water-insects, and small seeds, particularly those of the reed. It also frequents the weedy banks of streams and large ponds. The nest is built on wet ground, formed of aquatic plants and some finer materials.

LITTLE CRAKE.

Porzana parva.

As the greater number of examples of this species which have been met with in England have occurred in April or May, it may be presumed to be migratory, and from its frequenting similar situations, its food and habits are probably the same as those of its congeners.

The bird described by Markwick as the Spotted Gallinule, in Trans. Linn. Soc. (vol. iv. p. 9), which was shot by the side of a mill-pond at Catsfield, near Battle, in March 1791, turns out to have been the Little Crake, *Porzana parva*, of Yarrell. This interesting fact has lately been made known by Mr. Harting (Zoologist, 1890, pp. 343-344), in a notice of an unpublished manuscript by Markwick, now in the library of the Linnean Society, where there is also a coloured figure representing *Porzana parva*.

Two specimens have come into my own possession. The first was taken alive near Beeding chalk-pit, on the banks of

the Adur, near Shoreham, in October 1855. The second was obtained in the following remarkable manner :—Two men, one only having a gun, were hunting for Moorhens, on the 14th of April 1869, in some reedy brick-pits near Eastbourne, with a spaniel. The man without a gun staying behind, the dog routed out a Little Crake, which flew towards him. He threw his “ wide-awake ” hat at it, whereon the bird followed it down and ran into it, and he took it alive. I soon after purchased it of Mr. Bates, the Naturalist, of Eastbourne. It is recorded in Yarrell’s B. B. (vol. iii. p. 149). A fourth example is mentioned by Mr. Knox as in the possession of the landlord of the Dolphin Hotel, Shoreham, who shot it in that neighbourhood (O. R. 240). A fifth was picked up, in an exhausted state, near Seaford in March 1848, and brought to Mr. Ellman (Zoologist, p. 2148). A sixth was brought for preservation to Mr. Kent, a bird-stuffer at Hastings, in April 1859, p. 6537 ; and Mr. Dutton mentions a seventh, caught in Pevensy Marsh, in 1862, and seen by him in the flesh (Zoologist, p. 8330).

BAILLON’S CRAKE.

Porzana bailloni.

THE only example of this rare Crake which has occurred in Sussex is thus recorded in the ‘ Zoologist ’ (p. 4159, s. s.) by Captain Clark Kennedy, while staying at Eastbourne :—“ An adult female was captured in this neighbourhood, on the sixth of August 1874, in a very exhausted and emaciated condition. It contained in its ovary eggs about the size of pins’ heads.”

WATER-RAIL.

Rallus aquaticus.

THE Water-Rail is generally distributed, and may be found in the coarse herbage bordering streams and ditches. It is resident, though it seems very susceptible of cold, as I have several times, in very severe weather, observed it standing on one leg, with its feathers puffed out, and its head sunk between its shoulders, apparently asleep, for it has suffered me to take it in my hand. It feeds on small fish, tadpoles, mollusks, insects, and seeds. When pressed by a dog it often scrambles up into a bush, and I once observed a wounded one walking on the horizontal limb of an oak about 20 feet from the ground. From the gizzard I took several perfect specimens of *Clausilia nigricans* and the broken shells of *Aplexus hypnorum*. Its flight is slow, the legs hanging down. I once found a nest, in a very wet spot on Henfield Common, composed of green flags, and lined with finer aquatic plants, containing nine eggs. It has many times, in April and October, been caught in the gardens and streets of Brighton. Its call-note is a loud, hoarse, half-choked whistle, uttered principally at night.

It runs very swiftly, and swims well, if requisite. Mr. Jeffery (P. N.) states that he has found several small Millers' Thumbs (*Cottus gobio*) in its interior, and also mentions that a nest was found near Up Park, on a heath at a distance from water, pretty well concealed, but having a run to and from it. Mr. Harting informs me that he has twice found the nest of the Water-Rail in the parish of Harting, where he has repeatedly seen the bird during the winter months, sometimes running, like a rat, along the side of a ditch; at others, flushed by the dogs in the swampy ground bordering

the Great Pond. Mr. Harper, of Norwich, says that he had found in one of these birds a full-grown Common Shrew (Zoologist, p. 2990), and in p. 215, 1882, is recorded an instance of its feigning death.

MOORHEN.

Gallinula chloropus.

THIS, also known as the Waterhen, is the commonest of all the *Rallidae*, and there is scarcely a pond or stream in the county where it may not be found. Though somewhat wary, it is not nearly so much given to concealment as its congeners, and swims and dives with the greatest facility.

It often visits ponds in the neighbourhood of houses, and becomes occasionally very tame, even feeding with the domestic fowls. At Cowfold Vicarage several of these birds would come regularly, on hearing the bell at meal-times, to pick up whatever was thrown from the window, and were especially fond of boiled potatoes. I have seen one actually sitting on the back of a large dog lying on the doorstep there. It was very remarkable that this dog, though it would eagerly hunt the Moorhens in other places, was on the best of terms with those of the Vicarage, and never molested them. They will often wander about the meadows on the borders of streams and ponds, in search of worms, &c. They also feed on various insects and small fish. The nest is generally placed in the flags, or coarse herbage by the side of water, or on the branches of a tree overhanging it. I have found it, too, on the heads of pollards by the water-side, and once in the deserted nest of a Magpie, in a thick hawthorn, some ten feet from the ground. A Moorhen bred for several years

on the head of an old weeping willow, which had fallen into the pond at the aforesaid Vicarage. The nest is generally formed of coarse aquatic plants, and lined with softer portions of the same, but I knew of one placed on a stack of pease haulm, of which material it was entirely composed.

In walking, the bird constantly flirts up the tail, showing the white feathers, as it also does when swimming, nodding its head at every stroke of its feet. Its flight is heavy and slow, with the feet hanging down, and is seldom extended to any great distance, but at night it often flies round in large circles, uttering from time to time a loud note resembling the syllables, "tak-a-ma-hak." In severe weather it takes to running water, and often seeks for worms, &c., among the dry leaves, proceeding up the ditches into the wider woods. It perches at times on trees, and climbs the bushes with the greatest ease. When suddenly disturbed, it will sink bodily in the water, and, after a little while, a patient watcher may see the head and neck raised above the surface, and, looking round, the bird will rise suddenly and take itself off.

The curious so-called "hairy" variety of the Moorhen has twice occurred in Sussex, and the specimens are recorded by Mr. J. H. Gurney in the Transactions of the Norfolk and Norwich Naturalists' Society, vol. iii. pp. 581-587, in which he also gives a figure. One of these was obtained at Plumptre, near Brighton, in November 1878, of which Mr. Gurney observes: "This is the lightest I have seen, the underparts being quite white, and the back a bright orange-red, and this is the most hair-like." I saw this specimen myself at Mr. Swaysland's. The other was obtained at Isfield, near Lewes, in March 1883, and was purchased by Colonel King. The peculiarity of the appearance of the birds is due to the loss of the cuticle of the plumage, carrying with it the barbicules which give the soft look to feathers, and so leaving a worn threadbare surface; but from what cause this decor-

tication arises is wholly unknown. The colour of some specimens in this state is much tinged with yellow.

COOT.

Fulica atra.

FROM the white plate on the forehead, I have heard the Coot called the Bald Coot. It is by no means uncommon in Sussex, but much more maritime than the others of its family, keeping to the open sea in large flocks, in quiet weather, but when it is rough, betaking itself to our harbours and estuaries for shelter. As the breeding-season approaches, it comes inland to many of the large ponds, preferring those abounding in reeds; there it forms a large semi-floating nest of flags and broken reeds, on a platform of the latter, that have been broken down by the wind. Sometimes, when the water is shallow, it builds its nest up from the bottom, occasionally collecting a very large mass, raising it still higher on the approach of a flood. When wounded, the Coot requires careful handling, as it will scratch like a cat. On the wing the flight is powerful, the legs being stretched out behind it like those of a Heron. They feed on many fish and on vegetables. I have often watched the old birds from the Covered Bridge at Lucerne, where they are very tame, diving and bringing up green weeds for the young from the bottom of the lake. The water being exceedingly clear, they may be seen to use their wings beneath the surface as if in flight. The Coot is not much esteemed in England for the table, but many are exposed for sale in Continental markets, though the flesh is very strong and oily; yet, if carefully prepared, and buried for a few hours in the ground, it is by no means unpalatable, being very white and juicy.

The Coot flies much at night, like the Wild Duck, but the two present a very different appearance on the wing, even when it is too dark to distinguish colour. Both fly with out-stretched necks, but the shorter-winged Coot, with longer legs, carried out behind like a tail, may always be distinguished from the sharper-winged and longer-necked Duck.

ALECTORIDES.

GRUIDÆ.

CRANE.

Grus communis.

THOUGH formerly not uncommon, the Crane has now become a rare straggler. In the good old days of Falconry, and before the draining of the Fens, it bred freely in this country, and was strictly preserved for that sport. The nest is formed of long sedgy grass and very small twigs, placed on the ground. I have only heard of the occurrence of the Crane in Sussex on two occasions. One was shot by a butcher of the name of Geering, in Pevensey Level in May 1849, and was sent to Mr. Ellman, who recorded it in the 'Zoologist' (p. 3034). I afterwards purchased it from him, and it is still in my collection. It was a female, though recorded by Mr. Ellman as a male, and was in good condition, the only shot-mark found on the skin being that of a single corn, which had passed through the head. The other example I saw in the flesh the day after it was shot, at Pagham, October 18th, 1854. This was also in good condition, and was an immature female, the elongated plumes on the hinder part being only two or three

on each side. The neck was much stained with rusty brown. It is preserved in the museum at Chichester, and recorded by myself in the 'Zoologist' (p. 4512).

The taking of the eggs of the Crane was prohibited by an Act passed in 1534, under the maximum penalty of 20d. for every egg.

The Crane appears to have been much prized for the table, as in the 'Household Book' of the fifth Earl of Northumberland (1512) occurs this entry: "It is thought the Cranys must be hadde at Chrystymas and other principal feestes for my Lord's owne mees, so they be bought at 15d. a piece." Nevertheless, the learned Dr. Mouffet, in his 'Health's Improvement,' edited by Christopher Bennet, Ph.D., 1655, considers "the flesh (of the Crane) distinctly unfit for sound men's tables, and much more unmeat for them that be sick; yet being young, and killed with a Goshawk, and hanged for two or three daies by the heels, eaten with hot gelentine, and drowned in sack, it is permitted unto indifferent stomachs."

The food of the Crane appears to be corn, acorns, fenny seeds and bents, as well as potatoes. Its flight is described as with the head and neck fully stretched out, with a remarkable casting up of the wings in a direction over the back after each downward stroke. The voice is loud and trumpet-like. (See an interesting account of the Crane in Lapland by Mr. John Wolley Junr., 'Ibis,' 1859, pp. 191-198.)

I have two specimens in my own collection, which were caught in Spain by wire nooses placed in a hole in the ground, baited with olives. The fat is used by the Spaniards as a remedy for rheumatism and bruises.

OTIDIDÆ.**GREAT BUSTARD.***Otis tarda.*

THE Great Bustard was formerly well represented in Sussex. Dr. John Hill, in his 'History of Animals,' published in 1752, writes of this species (p. 483):—"I have seen great numbers of them on the downs in Sussex; they run away at the approach of men, but rarely, and indeed difficultly, take wing. They are often taken by greyhounds in a fair course, in the manner of a hare. Their flesh is very well tasted." Gilbert White, writing to Daines Barrington from Ringmer, near Lewes, in October 1770, says:—"There are Bustards on the wide Downs near Brightelmstone," and remarks that they look at a distance like Fallow Deer; and Professor Newton tells me that he was much struck by the justice of the comparison on the only occasion on which he saw a wild Bustard, with neck extended at right angles to the body, general "fallow" colour, and legs invisible, so that there might just as well have been four as two.

The Bustard was often hunted with greyhounds by my grandfather, who died at an advanced age in 1811. He told me that he had had many a good course with these birds. He used to go out early in the morning, after a foggy night, to look for them feeding in the wet turnips, when they were frequently so thoroughly soaked as to be unable to fly. He generally found them in little parties of from five to ten, and sometimes took five or six in a morning, commonly young birds, though occasionally he had known an old one to be caught, but they avoided them as much as possible, as, when overtaken by the dogs, they fought savagely, and had more than once damaged the greyhounds. They were most

numerous on a part of the Downs between the Dyke and a place known as Thunder's Barrow, from certain ancient tumuli supposed to be British. My father, also, while riding on the Downs, about a mile from Patcham, fell in with nine of these birds feeding in a turnip-field; this was about the year 1810. I have heard them spoken of by some of the old South-down shepherds as having been often seen by them. Of course the birds then bred there.

Markwick (Trans. Linn. Soc. vol. iv. p. 7) merely remarks, "Common Bustard sometimes seen on our South Downs." Mr. Knox, in his O. R. (p. 222), says:—"The latest instance of the Great Bustard having been observed in Sussex appears to have been that of a single example which was occasionally seen about twenty-four years ago near Blatchington by Mr. Catt, who then occupied that farm. It used to frequent the flat table-land which runs for a considerable distance in the direction of the Dyke. I have met with some very old people who in their younger days have seen flocks of these noble birds on the Downs." In Yarrell's 'British Birds' (vol. iii. p. 207) we find that on the 14th of January, 1876, a female was shot on the Downs near Eastbourne, and came into the possession of Mr. Monk, of Lewes; of course the bird was a straggler from the Continent. The food of Bustards is grass, young corn, turnip leaves, trefoil, and other vegetables, and they also kill and eat small mammals and reptiles, as well as, according to Pennant, those large earthworms which appear in great quantities on the Downs before sun-rising in the summer. In that season they conceal themselves in the standing corn, or in high turnips. They deposit their eggs in a hole scratched in the ground. Mr. Rowley, in his Orn. Misc. (vol. i. p. 103), quotes the following from 'Musæum Tradescantianum,' published in 1656, p. 4: "The Bustard, as big as a Turkey, usually taken by greyhounds on Newmarket Heath."

LITTLE BUSTARD.

Otis tetrao.

THE Little Bustard is a very rare straggler into Sussex, though in many parts of the Continent it is not uncommon, particularly in the South of France and in Spain, and at least seventy specimens have occurred in England.

It feeds on vegetable matter, field-mice and frogs, as well as on worms and slugs. It runs with great rapidity. I saw one, near Nîmes, whose pace was as fast as that of a rabbit when first started, and it kept it up across a large piece of ploughed land till out of sight. The note, in the breeding-season, resembles the syllables "prut, prut." This bird is not polygamous, and places its nest on the ground among high herbage.

The Little Bustard has been very rarely seen in Sussex, and does not appear in Markwick's Catalogue. Mr. Dennis, in a letter to me, dated December 9th, 1854, says, speaking of a Little Bustard:—"It was shot at Cuckmere in October 1846, by a Coastguardsman of the name of Bull, and sold by him to Mr. King, of East Blatchington, for half-a-crown. The purchaser, I fancy, was doubtful of it as an edible, and gave it to a painter of the name of Stent, by whom it was preserved." In March 1854 Mr. Dennis showed me the legs and feet of this bird, which were all that then remained, the rest of the specimen having been destroyed by moth. Mr. Knox (O. R. p. 222) says:—"I have lately seen a specimen of the Little Bustard, a female, which was shot at Bosham, near Chichester, a few years ago, by Mr. Alfred Cheesman;" and mentions that Mr. Jenyns, in his 'Manual of Brit. Vert. An.,' states that it has occurred in Sussex, but gives no date.

Two examples from this county are given in the 'Zoologist':—On December 11th, 1879, one was shot by Mr. Martin Spiller, near Eastbourne. It was in good condition, and was preserved by Mr. Swaysland, of Brighton. And in the vol. for 1887, p. 111, Mr. Percy E. Coombe records that a fine specimen was shot in a turnip-field by Mr. Coote, at Clymping, near Arundel, in October of that year.

LIMICOLÆ.

ÆDICNEMIDÆ.

STONE-CURLEW.

Ædicnemus scolopax.

THIS is a species still found in Sussex, principally on the South Downs and other wide, uncultivated expanses, as well as on the higher ridges of arable land, between the Downs and the sea, occasionally also on the wide plains of the interior. It was formerly much more common than it is at present, and is not unfrequently met with in the winter months, though generally considered a migratory bird, arriving in April and remaining with us till September. After the breeding-season it assembles in large flocks, and is very vociferous, especially at night, and before rain.

Its note has been compared to the sound of a rusty winch, such as that of a well, when the bucket is let down. It forms no nest, but lays its two eggs on the open field, and both the eggs and young so strongly resemble the stones, among which they are almost always placed, as to be very difficult to discover.

Its food consists of beetles, field-mice, and frogs, as well as of worms and slugs. It runs with great swiftness, and is much more active by night than by day; often visiting the beach at that time, for which its remarkably large eyes are particularly adapted. It has been killed in the neighbourhood of Chichester, in January and December, and has been occasionally met with on all parts of our coast in each of the winter months, when it seeks its food among the turnips. Mr. Dennis mentions that a Stone-Curlew was picked up in a very emaciated state under the cliff at Seaford in winter, and that another was put up in a piece of rape near East Blatchington, on November 20th, 1856; and I have heard of several others having been killed in the winter.

CHARADRIIDÆ.

DOTTEREL.

Eudromias morinellus.

THIS species is migratory, appearing in the latter part of April and mostly departing in October, though a few are met with still later. They may be found on the Downs, in "trips" of from seven or eight to a dozen, and sometimes in even larger numbers, and are very partial to fields of young rape, and turnips, where they feed largely on the small weevil-like beetles, which are so destructive to those crops. They used to breed in the North of England, particularly on Helvellyn and Saddleback, and still do so in Scotland—making no nest, but placing their eggs, three in number, on the bare ground, on the higher tops of the mountains—but never in this county. They are chiefly confined to the Downs, from about Brighton to a little beyond Seaford, and are not found in any number in West Sussex.

They run with great speed, and are very difficult to see on the ground. Mr. Dennis, in notes he has kindly sent me, mentions having seen and shot Dotterels from a trip of thirteen, on the hill above Blatchington, on March 22nd, 1853, and shortly afterwards twenty were reported to him as having been seen in a piece of rape, at Blackstone. On April 12th, 1858, eight birds were seen by him on the Blatchington hill; on the 24th he shot a couple, and on the 25th three young and two old birds. Mr. Jeffery informs me that three of these birds were shot at Runcton, near Chichester, on May 25th, 1859, and one at Sidlesham, on November 10th, 1875, and, in the same month, another at Earnley. They are much esteemed for the table.

Of the name Dotterel, Camden somewhere remarks:—"So called from their *extreme doatishness*, which occasions these imitative birds to be caught by the fowler's gestures by candle-light." And in Fuller's 'Worthies of England,' ed. folio, 1662, p. 149, may be found the following:—"This is an *avis γελωτοποιός*, a *mirthmaking* bird, so *ridiculously mimical* that he is easily caught (or rather *catcheth himself*) by his *overactive imitation*. There is a sort of *apes* in *India* caught by the *natives* thereof, after this manner. They dress a little boy in his sight, undress him again, leave all the child's apparel in the place, and then depart a competent distance. The *ape* presently attireth himself in the same garments, till the child's *clothes* become his *chains*, *putting off his feet by putting on his shoes*, not able to run to any purpose, and so is soon taken. The same *humour* otherwise pursued, betrayeth the Dotterels. As the *fowler* stretcheth forth his *arms and legs* going towards the bird, the bird extendeth his legs and wings approaching the *fowler*, till surprised in the net. But it is observed that the foolisher the *fowl* or *fish* (woodcocks, dotterels, cods'-heads, &c.) the finer the flesh thereof "

RINGED PLOVER.

Ægialitis hiaticula.

THIS is common all along the coast of the county, and may be considered resident, though partially migratory in spring and autumn. It is most numerous about the mouths of rivers and the muddy flats of the estuaries and harbours, though it may occasionally, though rarely, be met with on the sides of the larger inland ponds. I have seen it two or three times at the lake in Knepp Park, and in one instance an example was shot on the side of a small pond at King's Farm, in the parish of Cowfold. It has been met with at the large mill-pond at Warnham, and is common by the tidal ditches in Pevensey Level. In the breeding-season it resorts to the large expanses of beach, especially those at Rye and Shoreham, and lays its eggs, without a nest, in small depressions among the shingle, where both they and their young are, from their similarity to the pebbles around, exceedingly difficult to discover without a dog. Mr. Booth, however, found a well-formed circular nest near Rye, most elaborately constructed, a hole having been scraped out in the fresh green turf, in which was arranged a copious lining of small white shells, which must have been transported from the shingle bank, between a quarter and half a mile distant. The Ringed Plover is strongly attached to its young, and when they are in danger will feign lameness, and flutter about to entice away the intruder. When wounded it will swim and dive well. The note is a loud trisyllabic whistle, generally uttered on the wing. In the winter it associates in considerable flocks.

There is a small variety, or race, which arrives in May, and has the mantle much darker than that of the normal Ringed

Plover, and the legs of a deeper orange; the note also is quite different. These small birds were especially numerous about Shoreham in May 1880, and are not uncommon from Chichester in the west, to Rye in the east. There can be no doubt that this small race breeds on the Sussex coast, as it remains from May till October, when it totally disappears, yet I have never heard of any eggs having been found, which could be distinguished from those of the ordinary Ringed Plover. Both feed on shrimps and other small marine animals.

LITTLE RINGED PLOVER.

Ægialitis curonica.

THIS little Plover is exceedingly rare in Sussex, and I have seen no well-authenticated record of more than two examples having been obtained. One of them is in my own collection, and was shot, many years ago, at West Wittering, in May, but unfortunately I cannot give the year. Another was shot by Mr. Dennis, who sends me this note:—"I shot a Little Ringed Plover, together with a Redshank, at the Tide Mills Creek, Bishopstone, not knowing at the time what it was; as, though I had repeatedly shot small specimens of the Ring Dotterel, I had never met with this bird before." This was on August 28th, 1865. In Yarrell's 'British Birds' (vol. iii. p. 263) it is stated that the note is a sharp whistle, not like that of the Common Ringed Plover, and shorter in duration; and, on p. 264 *op. cit.*, it is observed that it very rarely appears on the sea-coast, but frequents, and breeds on, the banks of rivers, laying its eggs on the sand, and making no nest. Its food is similar to that of the two preceding species. I am not aware that it has ever bred in Britain. It may be

at once distinguished from *Æ. hiaticula* by the colour of the shafts of the primaries, which are all dusky except the outer one, which is white throughout.

In 'Zoologist,' p. 3279, Mr. Ellman states that he obtained a specimen of this scarce bird, at Shoreham, at the latter part of September 1851.

KENTISH PLOVER.

Ægialitis cantiana.

THE wide expanses of beach, especially those about Rye Harbour and Winchelsea, and those of the eastern coast generally, are the favourite haunts of this Plover. It arrives in these parts in April, and breeds there in May, though it is not so abundant as formerly. After the breeding-season it may be met with in small parties all along the shore, and has been obtained in the neighbourhood of Hastings and Bexhill, becoming more scarce to the westward of the county, though it has occurred about Shoreham and Worthing. It does not associate with the Ringed Plover, but appears for the most part singly, or in pairs, running very swiftly on the sands, and when at rest, standing much higher on the legs than its congener. In its mode of nesting it resembles the other small Plovers, and leaves the country by the end of September. The note is a shrill whistle, quite different from that of the common Ringed Plover.

GOLDEN PLOVER.

Charadrius pluvialis.

THE Golden Plover seldom arrives before January, during which month and the following large flocks visit the Downs

and the marshes, often accompanying those of the Lapwing. They are fond of fields of rape and turnip, and are very wary and difficult to approach. If, however, a shot can be obtained on the wing, the whole body of them will frequently dash down, and present an easy chance for the second barrel. As its name implies, it seems to delight in wet and stormy weather. In the breeding-season it retires to the mountains of the north of England and Wales, and makes a slight nest on the ground among the heather. In the year 1837, while travelling in Wales, I found several pairs on the summit of Cader Berwyn. The male birds were then exceedingly tame, running swiftly from one hillock to another in a state of great anxiety, and uttering a loud piping note. After watching patiently for about an hour, I saw a bird alight not far from me, and after running a short distance it threw up its wings and settled down on the nest, which I found to contain four eggs. Soon afterwards I accidentally fell in with three more nests, all with the same number of eggs.

As the breeding-season approaches, the bird undergoes an extraordinary change of plumage, the whole of the underparts, as also the sides of the neck, becoming of a deep black. It is very highly esteemed for the table.

GREY PLOVER.

Squatarola helvetica.

THE Grey Plover is more maritime in its habits than the Lapwing or the Golden Plover, being very rarely seen at any distance from the coast, and is by no means so numerous. It is principally found on the mud flats, where it feeds on small crustacea and on various marine animals. Occasionally, however, large flocks come into our estuaries in October and

November, especially when the weather is exceptionally severe. It is more usual, however, to find parties of five or six. It has appeared at Pagham Harbour early in October, and a few have been met with as late as May, when they have assumed the nuptial plumage; non-breeding birds have even remained throughout the summer. Mr. Jeffery mentions that several were found at Pagham Harbour as late as July 30, 1871, and some in summer plumage were seen in August 1873, but this is very unusual. It occurs all along the coast, from Rye to Chichester.

Its nidification was unknown until Middendorff found it breeding in Siberia, and figured one of its eggs (Sibir. Reise, II. ii. p. 209, pl. 19, fig. 1); and another taken by him on the Taimyr, July 1st, 1833, passed into the collection of Professor Newton, who described and figured it in the Proc. Zool. Soc. for 1861 (p. 398, pl. 39, fig. 2). In 1875 Messrs. Seebohm and Harvie-Brown found it breeding on the Tundras of the Petchora. There were many nests, formed of birch twigs and Iceland moss, containing four eggs each, intermediate in colour between those of the Lapwing and the Golden Plover. It feeds on small shrimps and crabs, and other crustacea, worms and green seaweed.

Its note, in the breeding-season, has been described as resembling the word "köp," and, on our coasts, on rising, it utters a call which may be expressed by "Tle-ih" in a very high key. Respecting its qualities for the table, Yarrell (vol. iii. p. 282), quoting Muffett, gives the following:—"The gray Plover is so highly esteemed that this Proverb is raised of a curious and male-contented stomach, 'a gray Plover cannot please him.' Yet to some the green [Golden] Plover seemeth more nourishing, and to others the Lapwing, which is indeed savory and light of digestion, but nothing comparable to Plovers."

LAPWING.

Vanellus vulgaris.

THIS is a resident, and by no means uncommon, frequenting the dry extensive heaths, the marshes, the roughest portions of uncultivated land, as well as the South Downs, in the summer. In each of these localities the nest may be found as early as the middle of April, always on the barest spots of the heaths, or those covered with short grass among the coarser herbage of the Downs. They occasionally breed on the more extensive old tracts of beach out of the reach of the sea, except in the heaviest gales, and almost destitute of vegetation except a few scattered plants, such as Sea Campion and Thrift.

They lay their eggs among the pebbles, and here the nest, in all situations very slight, has only the addition of a few stalks of those plants. I have found the nest, on one occasion, between Shoreham and Worthing; and Mr. Dennis states that they breed on the beach eastward of Rye Harbour, in a similar locality.

The Lapwing is particularly cunning in its attempts to lead away any intruder on its eggs or young: fluttering on the ground, or flying round with heavily flapping wings, and occasionally tumbling as if shot.

In the latter part of September, or beginning of October, they collect in flocks, often of several hundred, flying from place to place in loose order. At this time they especially affect the fields of rape or turnips, feeding on the black caterpillars known to farmers as "niggers," thus ridding the crops of this most destructive pest. They feed also on earthworms, slugs, and insects. Both the eggs and the birds are in high demand for the table, though the flesh is not so

much esteemed as that of the Golden Plover. In Sussex it is called the "Peewit."

Mr. Booth states that he has "several times, while on the North Sea in October, seen flocks of from three to five hundred, flying slowly and steadily, each keeping its own station, straight for the shores of Norfolk or Suffolk." Yet he had never been able to ascertain from the fishermen, or light-keepers, that they had ever been observed on their return journey. We certainly receive large accessions to their numbers in the winter, and, in severe weather, large flocks may be seen flying along the coast, generally from east to west.

TURNSTONE.

Streptilas interpres.

This very beautiful little bird derives its name from its singular habit of turning over with its bill the pebbles on the beach, or other rejectamenta of the sea, at any distance from which I have never heard of its being seen (possibly from the small size of our rivers) in this county. In other counties it is said to have been found on the river-banks far inland. With us a few remain throughout the year, but as a rule the Turnstones arrive in small parties of young birds about the middle of July, though the main body does not make its appearance till about the second week in August. Along the whole coast, from beyond Rye to the borders of Hampshire, they may be found in small parties and, if not too much disturbed, are very tame.

Some years ago, I was much interested in watching a pair acting in concert in their endeavours to turn over a flat-fish on the beach between Shoreham and Worthing, evidently

for the sake of the marine animals on its underside, which, I should have thought, would have been shaken off by their efforts; however, they succeeded at last in their endeavours, and appeared to derive a hearty meal, and, on their leaving the spot, I could find no appearance of their having eaten any part of the fish.

On the beach it is very silent, but, on being put up, utters a loud twittering note. It goes far north to breed.

OYSTER-CATCHER.

Hæmatopus ostralegus.

IN this county the Oyster-catcher is usually known as the "Olive," of the origin of which name I have no information. I have now and then heard it called the "Sea-pie," from its black and white appearance. It remains with us throughout the year, preferring those parts of the coast where there is the largest expanse of beach. In former days I have seen considerable flocks between Shoreham Harbour and the sea, where it then bred, and where it is still occasionally met with. Another favourite resort is the widely-spread mass of shingle near Rye, where it still breeds in considerable numbers.

An amusing story, how true I cannot say, is told of a man who used to distribute the eggs among his daughters to hatch, each of the four young ladies taking their turn with them in bed, and when hatched he had a ready sale for them at 10s. a piece. I well remember that about the year 1823 I often saw a small flock of Oyster-catchers driven from the Pavilion Gardens, at Brighton, across the Steine, by a man in the royal livery, armed with a long stick, having a piece of red

cloth at the end, who took them for a few hours' recreation on the shore.

This species forms no actual nest, but collects a few white shells, and pebbles, and now and then pieces of tobacco-pipe, around the eggs. What may be the object of this, when on the beach, does not easily appear, but when on the bare rock, where I have often found them, it is no doubt to prevent the eggs from rolling, or being blown away.

Although in Scotland, where I have seen it on the Spey and other rivers, it goes far inland to breed among the flat stones of the shores, I have never heard of it inland in Sussex, the muddy banks of our small rivers being unsuitable to its habits. Its note is a loud whistle, which may be heard a long distance, and it swims with great ease when so disposed, and dives also. It feeds on limpets, mussels, and crustacea, prizing off the two former from the rocks with the greatest ease.

Notwithstanding its name, I greatly doubt its ability to open the shell of an oyster, or its power to withdraw its bill, should it attempt to scoop out the animal while gaping for the tide. The flesh is by no means desirable, although it is stated in the 'Northumberland Household Book,' "Item: Scepyes for my Lorde at the princypall Feestes, and non other tyme."

SCOLOPACIDÆ.

AVOCET.

Recurvirostra avocetta.

OWING to extensive draining, this bird, which was formerly not uncommon in the marshy districts of the county in the

summer, and along the coast in the winter, has now become quite extinct as a native, and I have never seen it alive except in confinement. Many years ago, I was told that three had been observed on the mud flats near Old Shoreham bridge, and I went in hope of seeing them, though I did not succeed; but walking on the mud I came to a spot where I observed many zigzag marks on it, which, I have no doubt, were made by these birds, as I have seen elsewhere that their method of obtaining food is by passing the somewhat flattened portion of their whalebone-like bill over the surface of the mud, thus raising the little crustaceans known as sandhoppers, and catching them with the upturned point of it. The Avocet is a good swimmer, and dives well. When disturbed it flies round the intruder, uttering loud whistling cries.

Markwick states that it was not uncommon on the sea-coast of Sussex, and that he had found a young one near Rye, which seemed to have been just hatched, and took it in his hand, the old birds flying overhead.

Mr. Jeffery in his P. N. records that an Avocet was shot in June 1859, on a tide-mill pond at Sidlesham; and in the 'Zoologist,' p. 9211, he mentions another, shot on the same pond, and that this proved on dissection to be a male; the gizzard contained nothing but a few stones.

On July 14th, 1853, an adult Avocet and two others, young of the year, were shot by Mr. Dennis, at the upper tide-mill near Newhaven, and a few mornings after, three others were obtained on the tide-mill salts. He also informs me that they were very tame, and he particularly observed their mode of feeding, which seemed to be by thrusting their bills forward and a little upward into the softest mud, where there was an inch or two of water, the bird making sometimes a short and very rapid run, the webbed feet being apparently excellent mud-pattens. Mr. Dodd, of

Chichester, told Mr. Knox ('Zoologist,' p. 229) that at a late period he saw a flock of five Avocets at Pagham Harbour; he shot two and wounded another; the survivors, however, did not attempt to fly away until he had advanced to pick up the dead bird. He had previously observed their mode of feeding, and noticed the same ploughing of the sand as in the Spoonbill, but with this difference, that the Avocet ploughed with the convexity of the bill. Two of these are now in the Chichester Museum; the wounded one was purchased by Mr. Tuffnell, of Mundham, and placed in his garden. Here the same action was observed of ploughing, or mowing, from right to left in the grass, or rather brushing it from side to side. Mr. Allen Bell, writing from Hastings in January 1870 ('Zoologist,' p. 2024, s. s.), states that he was shown an Avocet in immature dress, which was one out of a flock of three shot at Rye, during the snowy weather of the previous December.

From the form of the bill it was formerly known in Sussex as the Cobbler's Awl.

BLACK-WINGED STILT.

Himantopus candidus.

THIS remarkable and extremely rare visitor has been observed in the county but a few times, and at very long intervals. It does not breed in Britain. In his account of 'Five Months Birds'-nesting in the Eastern Atlas,' Mr. O. Salvin gives the following account of the habits of this bird:—"Abundant at Zana, a few pairs occurring at Djendeli and Guerah el Tharf. Over the whole of the lower end of the Marsh of Zana and Chot Saboun the Stilt breeds in

great abundance among the wet grass, choosing for the position of its nest a small tuft, so as just to keep the eggs out of the water. Sometimes, however, this object is not obtained, as we occasionally found eggs half immersed. The bird uses its long legs with much greater ease than might be expected; and its long deliberate strides as it walks about in search of food are far from being ungraceful. The only time they seem to be in its way is at the moment of taking flight, when they hang awkwardly down till the bird, being fairly started, stretches them out, extending them far beyond the tail. We used to search for the nests of this bird on horseback, and on observing one sitting, to ride up without taking our eyes off the place. The bird would remain quiet till we were within thirty yards of the nest, when it would walk slowly away, till, aware of our purpose, it would rise and fly, wheeling and screaming overhead. The young Silt is able to walk almost immediately on leaving the egg; one we found was capable of moving about, while the other three were struggling to free themselves from the shell. The nest is composed of a few bits of dead reed or grass." (See 'Ibis,' 1859, p. 360.)

It breeds also in Spain, and in many parts of Asia and Africa. Its note may be expressed by the word "pee" several times repeated. Mr. E. Newman records in 'Zoologist,' (p. 3945) that an example was obtained at Bosham in December 1855 by Mr. A. Cheeseman; and another was shot on a small pond near the junction of the Midhurst and Bepton Commons, May 17th, 1859, of which Mr. Knox gives an interesting account in 'The Ibis,' 1859, p. 395, from which the following is extracted:—The pond was very shallow, being only about a foot deep at fifteen paces from the shore, and was covered with the blossoms of the Water Crowfoot, *Ranunculus aquatilis*, which were inhabited by numerous minute Dipterous and Colcopterous insects. The

bird was first observed by a farmer's boy, who was driving some cows home in the evening, standing up to its belly in the water, picking, as he thought, at the flowers. It allowed him to approach within twenty yards, then rising, alighted again on the opposite bank. The boy then went home and told his father, who, hurrying to the spot with a loaded gun, found the bird still employed in picking at the flowers. It was then extremely wary and shy of the gun. The man, however, whose name was Pearson, at last succeeded in shooting it as it was standing up to its knees in the water, snapping at the insects. It was but little injured, and was brought the next morning to Mr. Knox, who found, on dissection, that it contained a number of eggs about the size of a pea. The stomach was crammed with insects, and the elytra of small beetles and gnats in a half digested state.

On May 6th, 1880, Mr. Clark Kennedy, being in the marshes between Eastbourne and Polegate, had his attention attracted by his fox terrier chasing a bird along a deep ditch; it ran with long strides for a few yards, and then flew close past him, when he saw that it was a Stilt. The bird appeared to be very tired, and only flew some two or three yards, alighting in a similar ditch, whence he did not again dislodge it ('Zoologist' for 1880, p. 300).

GREY PHALAROPE.

Phalaropus fulicarius.

IN some seasons this most elegant little bird visits us in very large numbers. Mr. J. H. Gurney informs us that out of some five hundred which had appeared in the great immigration between August 20th and October 8th, 1866, about

two hundred and fifty were obtained in Sussex. At that period they were many times observed on small pools ten or twelve miles from the sea, and I was particularly interested in watching one of them swimming about in an extremely dirty and offensive pool, at the back of the Inn at Albourne. It swam remarkably high in the water, constantly nodding its head and dipping its bill, while snapping at the numerous flies with which the place was infested. It allowed me to approach it within a very few yards, occasionally flying close to me in perfect silence, both of wing and voice, with a most graceful and bat-like flight.

There was another extraordinary immigration in the autumn of 1869, when many were obtained all along the coast of Sussex, and as far west as Dorsetshire. They were so tame that they might be knocked on the head with an oar. In the first immigration many were taken showing more or less trace of the red or nuptial plumage. As a rule, when found inland, they are met with singly, or at most in pairs.

This Phalarope seems quite at home, even in a rough sea, where it feeds on minute animalcules, in search of which it is incessantly nodding its head, and thrusting its bill under water. It goes far north to breed, and the eggs have been found in Northern Siberia and Alaska; they are laid in a mere depression in the turf. The female has the brightest colour, and is somewhat larger than the male.

RED-NECKED PHALAROPE.

Phalaropus hyperboreus.

THIS species is very similar in its habits to the last mentioned, and though much rarer, has appeared a few times in the county. It formerly bred in Orkney.

About the second week in September 1845, a male Red-

necked Phalarope was shot on a small pond near Old Shoreham, and is now in my collection. It was in pure winter plumage. On the 28th of May, 1846, another was obtained, also on a small pond, at Falmer; the ovary containing eggs in an advanced state; this was in full nuptial plumage, and had no doubt been driven out of its course by a severe gale. It was very tame, swimming and dipping its bill in the water like its congener. Mr. Ellman, in the 'Zoologist' (p. 3085), records a third, in winter plumage, shot on a pond near Lewes, in November 1851.

On October 4th, 1853, a fourth was killed on a pond in the heart of the village of Rottingdean, while swimming among some tame ducks, in nearly complete winter plumage, a few red feathers only appearing on the neck. This is recorded by Mr. Arthur Hussey (Zoologist, p. 4096-7). A fifth example was observed, while swimming on a flooded meadow near the sea, opposite the village of Bexhill. It was in company with a Schinz Sandpiper, when both were obtained at one shot, by Mr. Robert Kent, of St. Leonards-on-Sea. They both proved males (Zoologist, p. 6537).

WOODCOCK.

Scolopax rusticula.

THIS bird breeds every year in most counties of England, but is comparatively scarce till the arrival of large flights in October, of which the main body pass on to the westward, leaving small detachments, which gradually spread over the wooded parts of the county. On their first arrival many drop among the furze on the South Downs, and they have been several times picked up in the gardens of the towns on the coast.

When arriving in a heavy gale, they are generally in an exhausted state, and hide themselves in most unlikely holes and corners, to obtain shelter. For example, I well remember being told by the late Mr. Tayler, the eminent surgeon at Brighton, that, on coming out of a house on the Marine Parade, he saw something dash under the apron of his carriage as it stood at the door, which proved to be a Woodcock. They appear to breed in the county much more commonly than formerly, when to have found a nest at all was thought worthy of notice. They breed very early, nesting in March, and by the end of May the young are fully fledged. As the covers are rarely disturbed in the early spring, except for marking timber or cutting hop-poles, they may breed more numerous than is generally supposed. "Mr. T. Monk, of Lewes, some years since, was at considerable pains to obtain statistics as to the number of Woodcocks remaining to breed in the eastern division of Sussex; and, extraordinary as it may appear, the conclusion he arrived at was to the effect that in seven districts of East Sussex, comprising twenty-one parishes, there were annually on an average from one hundred and fifty to two hundred nests of this bird." (*Zoologist*, p. 434, 1879.)

That the young are carried by the parents from place to place has been now indisputably proved, and one manner in which they are conveyed is admirably depicted in the frontispiece to the volume I have quoted. I have not myself seen many nests. The first was in a wood in the parish of Woodmancote, in March 1851, and another I saw in Eridge Park, in March 1852, and two more in St. Leonards Forest. I have received the eggs from Petworth, Arundel, and Tunbridge Wells, and have been informed that in the latter neighbourhood the eggs have often been found. Mr. Booth, in his 'Rough Notes,' states that in his bird-nesting days he had frequently met with them about Catsfield and Ashburnham.

The Woodcock conceals itself in the covers during the day, on the ground under the thick holly bushes being a favourite retreat. In the evening it flies out to feed in boggy places, when it may be easily shot. It always returns to cover before sunrise. This sport is called in Sussex "wicketing;" I suppose from the wicket gates across many of the rides in the woods being convenient to lean on, while awaiting the arrival of the birds. It runs very fast when wounded, and feeds on earthworms, &c., for which it probes the ground in the softest spots, as well as on small land and freshwater shells. I have taken from its stomach those of *Clausilia nigricans* whole, and the remains of those of *Aplexus hypnorum* comminuted.

The nest is on the ground, and composed of dead leaves, in Sussex generally those of the oak. It is exceedingly difficult to see the bird when sitting. A keeper once attempted to point one out to me, but not till he nearly touched it with the muzzle of his gun could I see it, and then only by accidentally catching sight of its eye, showing the aptitude of the lines in Butler's 'Hudibras,'

"Fools are known by looking wise,
As men find Woodcocks by their eyes."

In the unpreserved parts of Sussex they are often caught in horse-hair nooses, called springes, set in their feeding places. When flying at night they utter a croaking note, but at other times are remarkably silent. When flushed the flight is often perfectly noiseless, the bird going off like an Owl; at other times it makes quite a loud clapping of the wings, like some of the Pigeons, and goes off twisting sharply like a Snipe. The male is smaller than the female, and both are much lighter in colour in summer than in winter. Those which migrate depart in March.

GREAT SNIPE.

Gallinago major.

THE Great Snipe is rare in Sussex, and does not visit England till the autumn. At that season of the year it does not frequent the bogs and marshes, but in the few instances in which it has occurred, was mostly found among turnips or on dry grass-land. When flushed, it rises in silence, as a rule, though occasionally it utters a few harsh notes.

The nest is found in Denmark, Sweden, Norway, and Russia, from the Baltic to Archangel, and in the breeding season, like the Common Snipe, it mounts high in the air, and makes a drumming noise on its descent. At that time, it frequents the higher regions as well as the marshes of the lowlands and coast. The food of the Great Snipe consists of worms and slugs, also of insects, especially those of the gnat tribe. (Vide Yarrell, vol. iii. pp. 338, 339.) Markwick, in his Catalogue of Sussex Birds, says, "I have seen one of this species which was killed near Horsham." Mr. Dennis (p. n.) states that one was obtained on Larnes Farm, Upper Beeding, and another at Pond Lye, near Cuckfield, but gives no date. Mr. Knox mentions that the Great Snipe "has been killed on Pevensy Levels, and one was shot, in the month of October, a few years ago by Mr. Trist, a wine merchant at Brighton, on the Downs, near the Racecourse, a singular locality for this bird."

In the 'Zoologist' we find the two following notices from Mr. Ellman and Mr. Monk respectively:—"A specimen of this rare bird was shot in the levels near this town, in October 1849, Lewes." "A fine specimen of the Solitary (or Great) Snipe, which was shot near Lewes, was brought me on the 10th of October, 1867; it was a female, extremely

fat, and weighed nearly $7\frac{5}{4}$ oz.; it was preserved by Mr. Swaysland." Again, at p. 1482 (s. s.), an instance is recorded of a Solitary Snipe caught in a gin which had been set by the side of a watercress bed, at Sompting, about two miles from Worthing, on the 24th of October, 1868, and came the same day into the possession of Mr. J. W. Stephenson, of Loudoun Place, Brixton Road. At p. 492, Mr. Parkin mentions that Mr. C. J. Ebdon, of Coghurst Hall, near Hastings, informed him that he flushed a Great Snipe on that estate on October 6th, 1881.

Mr. Bristowe writes to me of a specimen shot at Stream Farm, Dallington, near Battle, September 23rd, 1875, by Mr. Watts, of Caldbec Hill; and Mr. Child, of Slinfold, has kindly informed me that he saw a Great Snipe flushed in a barley field, and shot by Mr. William Lintott, of Horsham, about ten years ago; and from Mr. Nicholls, of Eastbourne, I hear of another, shot in Pevensey Marsh, which he saw in the flesh in 1888. Mr. Aubrey Hillman, of Iford, near Lewes, has also kindly written to tell me of a Solitary Snipe which he shot, in the early autumn of 1860, at Lower Stoneham, near Lewes, but although its great size and weight (over 8 oz.) were observed at the time, he, not knowing its rarity, did not have it preserved. Mr. P. Sorrell, Old Humphrey's Avenue, Hastings, tells me that he has in his collection two examples killed at Rye.

Markwick, in his Catalogue, Linn. Trans. (vol. iv. p. 8), says, "I have seen one of this species, which was killed near Horsham;" and in an unpublished MS., now in the Library of the Linnean Society (p. 23), this specimen is again referred to, as seen by the author, and killed near Horsham. It was obtained on the 1st of October, 1793, and a full description is given of it, together with a water-colour drawing.

COMMON SNIPE.

Scolopax cælestis.

THE Snipe is resident in the county, but the main body arrive, either from abroad, or from their inland breeding-places, about the first week in August. In my younger days I was a very ardent sportsman, and, living at Henfield close to the celebrated Common, the first piece of wheat which I saw reaped made me think it worth while to walk it for a Snipe, and seldom was the trouble in vain. There is something peculiarly attractive to this bird there, though it is not a large tract, in fact only about forty-five acres in extent. I was a very diligent observer of its bird-life, and generally got the best sport by working up wind when it was blowing half a gale. I was often there waiting for daylight, for, as the ground was unpreserved, it was a case of first come first served, and I have had many a good bag there, the best being twelve couple and a half, and a Teal. From constant observation, I gradually discovered where those rising out of shot or missed went to, and after finishing the Common, started in pursuit. One of the most singular places was a thick plantation in a little wood called the Worm's Copse, consisting in part of spruce fir, where it was almost impossible to get a shot. I have several times looked over this copse before going on the Common, but in no instance did I ever find a Snipe, and should never have gone there for them had I not one morning seen a wisp of seven or eight, when some other person was shooting on the Common, pass over, and marked them down there. The Snipe breeds sparingly in Sussex, but the nest has been found now and then on the aforesaid Common, as well as on the heaths near Balcombe, and on Ashdown Forest, Pevensy Level, and Horsham.

Its food is similar to that of the Woodcock. Its usual call-note when flushed resembles the word "scape," two or three times repeated, and is never heard at any other time. Mr. Booth, however, states that it has a call-note in the breeding-season, consisting of two notes. When the young corn is come up in the spring, this bird is often caught in the wet furrows, in horsehair nooses, like those used for taking Woodcocks. The singular sound heard when the Snipe is descending is now satisfactorily ascertained to be caused by the vibration of its wings and tail.

The Snipe, when first started, goes off nearly close to the ground, with many twistings, then flying round in large circles, suddenly drops like a stone into the marsh, if it does not leave it altogether.

In very severe frosts the Snipe leaves the inland bogs and betakes itself to the salt-marshes, where, although it is at other times the best of birds for the table, the flesh becomes rank and unpalatable. In this country it is rarely seen but on the ground or on the wing, though I have more than once observed it on the top of a larch, and two or three times on a rail. In the northern regions it has often been seen on trees.

Of the variety known as Sabine's Snipe, which is now admitted to be merely a melanism of the Common Snipe, only a single example seems to have been obtained in Sussex, viz. that which is mentioned by Mr. Knox in his *O. R.* p. 236. I heard of this bird and told Mr. Knox, who went to Chichester and bought it. It was shot by one Sergeant Carter, who informed me by letter that he found it on Appledram Common, where it rose out of shot, and marking it down, it again rose at a long distance, when he killed it, and sold it for five shillings to a Mr. Andrews, who refused three pounds for it. He afterwards had it stuffed by Mr. Smith of Chichester, who sold it to Mr. Knox for five pounds.

Carter further adds, "You will say 'Old fool, for letting it go so cheap.' I have no doubt there is another in the neighbourhood, as two countrymen told me they had put a Snipe up out of the springhole in Mr. Halsted's marsh, as black as a Starling, the Saturday after I killed mine. If I should get the other the price would make me sing 'O be joyful.' " I never heard that the second was obtained.

JACK SNIPE.

Scolopax gallinula.

THOUGH not at all uncommon, the Jack Snipe is by no means so abundant as the last described, and, unlike it, is never found in wisps, seldom more than a pair being flushed together, and it is far more usual to find it solitary. When alarmed it lies very close, so much so that one day, having no more ammunition, I obtained three, immediately under the nose of my pointer, by dropping the muzzle of my gun upon the bird, which my readers will no doubt call a very unsportsmanlike proceeding. When flushed, the Jack Snipe seldom flies to any great distance, and does not twist about like the Common Snipe. Many stories have been told of the difficulty of shooting it, but I must say that I think it is even greater in the case of the Common Snipe, as the Jack hangs in the wind, and, though flying sharply for a moment, afterwards goes off very slowly, but if one waits till it is at a reasonable distance it is very apt to drop just as you are about to fire. It is found, not in the parts where the bog is deepest, but on the drier spots around the little springholes on its margin, or the runlets trickling down towards it. On the Common I have so often mentioned, I always knew where to find one, if any were there.

The first week in October is the earliest time of its arrival, as a rule, but I have met with one on September 1st. It never breeds in this country, and we are indebted to the late Mr. Wolley, who found it breeding in Lapland, for a knowledge of its nest and eggs. The former is stated by Yarrell, vol. iii. pp. 354-5, to be "made loosely of little pieces of grass and *equisetum*, not at all woven together, with a few old leaves of dwarf birch, placed in a dry, sedgy, or grassy spot, close to the more open swamp."

The food of this bird is similar to that of the Common Snipe, and during the breeding-season it makes a drumming noise, which Mr. Wolley likens to the cantering of a horse over a hollow road.

BROAD-BILLED SANDPIPER.

Limicola platyrhyncha.

OF this species I am not aware of any example having been obtained in Sussex, except one in my own possession. I was walking near the west end of Brighton and met a boy carrying a bunch of birds; I asked him where he got them and what he was going to do with them. He replied that his father shot them on the beach near Shoreham, and that he was going to see what he could get for them at the poulterer's. I asked what he expected that would be, and he said twopence a piece. I then said, "If you like I will give you sixpence for this one;" the boy accepted it and was very much pleased, and so was I. He said that there was a large flock, and that his father killed the ten he was carrying at one shot; with the exception of the one I selected, they were all Dunlins. This was in the latter part of October 1845. On examination the bird proved to be in winter plumage,

except one scapular feather and a small patch on the occiput. In many parts of the Continent it frequents the coast and inland waters. According to Yarrell (vol. iii. p. 365), Mr. Dann was the first discoverer of its breeding-places in Norway and Lapland, where it forms its nest on dry hummocks in the most inaccessible bogs. On its first appearance it is wild and shy, and, on being disturbed, it soars to a great height, rising and falling suddenly like the Snipe, and uttering the notes "two-woo," rapidly repeated; but, as the weather becomes warm, it changes its habits, and is then very difficult to flush, and when it rises only flies a short distance and drops again. In the stomach little has been found save small insects and larvæ.

PECTORAL SANDPIPER.

Tringa maculata.

THIS Sandpiper has but rarely been met with in England, being an accidental visitant from N. America, where under the names of "Meadow Snipe" and "Grass Snipe" it is, according to Yarrell, generally distributed from Hudson's Bay to Alaska, in winter, and is supposed to breed in the Arctic Regions, but the egg is yet unknown. It is abundant in summer, in Labrador, frequenting low muddy flats. Its habits resemble those of the Common Snipe. It feeds on insects, small seeds, and crustacea. In Sussex the only occurrence is that recorded by Mr. Harting in his 'Hand-book of British Birds,' p. 141, as having been obtained at Eastbourne, in September 1870.

BONAPARTE'S SANDPIPER.

Tringa fuscicollis.

THIS *Tringa* is also an inhabitant of N. America, and is nearly as rare in Sussex as the last. According to Yarrell (vol. iii. p. 375), it is very abundant on the Atlantic coast from Labrador to Florida. Dr. E. Coues states that he has frequently observed it on the rocky shores covered with seaweed, and that it is, of all Sandpipers, the most gentle and confiding. In this country an example was obtained by Mr. Kent, of St. Leonard's-on-Sea, who states in the 'Zoologist,' pp. 673-7, that the Schinz (or Bonaparte's) Sandpiper was in company with a Red-necked Phalarope, the latter swimming and the Schinz wading in a flooded meadow, about two hundred yards from the sea, directly opposite the village of Bexhill; they were not at all shy, and he killed both at one shot. They proved to be males. This was the first recorded Sussex specimen, and the date was October 8th, 1857.

Another was taken at Eastbourne, now in possession of Mr. Gurney, on November 12th, 1870. It was alone and standing on one leg, which attracted the attention of the person who shot it, though he at first mistook it for a Dunlin. It was a male bird and was recorded by Mr. J. H. Gurney, jun., in the 'Zoologist,' p. 2442, s. s.

DUNLIN.

Tringa alpina.

THE Dunlin, also called the Purre, or the Ox-bird, is the most abundant of all the waders on the whole of our coast,

and is found in small parties, and occasionally in very large flocks, on the beach and sands as well as on the mud flats.

When disturbed on the sea-side they fly in a compact body and make a semicircular excursion over the sea, returning to the beach at a few hundred yards distance. During these flights the whole body wheel and turn all together, showing at one moment the dark plumage of the back, and at the next the pure white of the underparts, and uttering a loud but somewhat soft cry, "Tui, Tui." While feeding the bird runs very swiftly, and is very restless, constantly shifting from place to place, following each receding wave and picking up marine insects, worms, and small crustacea. It seldom proceeds up the rivers beyond the influence of the tide. It goes northward to breed on the moors of England and Scotland, sometimes on mountains at a considerable height above the sea, forming the nest in a dry tuft of sedge or rushes, lining it with small pieces of grass and heather.

LITTLE STINT.

Tringa minuta.

In the latter part of May, or the beginning of June, small parties of this little wader may be found along the coast, many more arriving in August and September. Mr. Booth mentions that a heavy gale from the south-east not unfrequently brings numbers to the coast of Sussex as late as October, thus checking their southerly migration. It is occasionally met with on the mud of the harbour at Shoreham, and in the salt-marshes in the neighbourhood, in fact on suitable spots all along the coast. In the eastern division one of its favourite haunts was formerly a piece of marsh

land near Rye, known as the "Nook"; but owing to the drainage, it is, though still found there, by no means so abundant as formerly. To the westward of Pagham Harbour is another attractive spot, but unhappily, ornithologically speaking, the same remark equally applies there, the sea being now entirely shut out, and the mud preparing for the plough. It is a social little bird, often joining parties of the Dunlin and the Curlew Sandpiper.

It retires far north to breed. The eggs were first found by Middendorff in Siberia, and in 1875 it was found breeding on the Petchora by Messrs. Seebohm and Harvie Brown, of which discovery there is a most interesting account in the 'Ibis,' 1876, pp. 294-308. The note is described as a "*whispering warbling trill*," and the nest as a mere depression in the turf with leaves of the cloudberry and other dry materials scraped together for the lining.

TEMMINCK'S STINT.

Tringa temmincki.

THIS is a much rarer species than the Little Stint, and never found on the sand or open coast-line of the sea-shore, but frequents the mud flats of the tidal rivers. In August and September small parties arrive on the rivers, ponds, and mud of the Adur, and of Shoreham Harbour, also on the salt-marshes a mile or so up that river. On July 25th, 1878, one was shot by Mr. Booth, at Shoreham, in full summer plumage, and its manners resembled those of the Common Sandpiper. On this account Mr. Jeffery (p. n.) states that this and both the Stints are often called "Wagtails," and

he mentions that two were shot inside the mud walls of Prior's Marsh, near Chichester, on Aug. 25th, 1873, and that their note resembles "Chicket, Chicket." The eggs were discovered by Mr. Wolley in the interior of Lapland, who states that the note was like that of the Red-necked Phalarope and the Sanderlings, and gives a very interesting account of it, too long to quote. He also states that the nest is placed in hummocky ground covered with *Carices* and cloudberry. It is a mere depression in the ground, with such leaves of the cloudberry and other dry material as were in easy reach. The bird flew round, or perched on a stone, or the gable of a cottage, uttering a trilling note, which put him in mind of that of the Grasshopper Warbler (*vide* Yarrell, vol. iii. pp. 400, 401). In the 'Zoologist' (p. 3279), Mr. Ellman records that he obtained a specimen of this minute Sandpiper among the mud-pells at Newhaven, October 5th, 1851.

CURLEW SANDPIPER.

Tringa subarquata.

THIS is a migratory species, arriving in May, when these birds are in full breeding-plumage. In August and September much greater numbers join them, consisting for the most part of birds of the year.

They seldom remain long enough to have assumed the winter plumage, but before leaving they are in a state of transition, many of the red feathers of the underparts being mingled with the approaching winter dress.

Their habits in Sussex are much the same as those of the

Dunlin, with which they often associate, though still oftener with the Little Stint. They are by no means uncommon, and are found all along the coast. Our rivers being very small, I have never heard of their occurring inland in Sussex. The breeding-place is as yet unknown.

PURPLE SANDPIPER.

Tringa striata.

THE Purple Sandpiper may be met with along the whole coast of Sussex, where it is generally alone, or at most with two or three in company. It prefers the more rocky parts, for example the large masses of chalk fallen from the cliffs between Brighton and Seaford Head, where it may be found all through September, October, and November running about among the sea-weed, or if on the beach, following the receding waves, and often getting buried in the surf, feeding on small crabs and other crustacea and on the contents of minute bivalves and other shells. It is very tame, and its note, when disturbed, is a soft “weet, wit” two or three times repeated. It breeds on the whole coast of Norway, the Faroes, Iceland, Greenland, Spitzbergen, and Nova Zembla. The nest is tolerably compact, deep in the ground, and lined with dead leaves.

KNOT.

Tringa canutus.

THE Knot has received its name from the old legend of King Canute, on account of its habit of feeding on the

margin of the sea-shore, close to the advancing waves. It is migratory, making its first appearance in April, in small numbers, which continue to increase throughout that month and the next.

Many, even then, show slight indication of the change from the winter to the summer plumage, and by the end of June the main body have entirely assumed it, when they depart for the breeding-season, with the exception of a few which remain throughout the year, frequenting the open coast. During the whole of May large flights pass eastward, following the line of coast, five or six miles out at sea. On the approach of a heavy gale they leave the shore and betake themselves to the mud of the harbours and rivers as high as the salt water flows, and are very seldom found further inland. When feeding on the mud they assemble in vast flocks, and are very easily approached, and with a punt-gun as many as sixty have been obtained at a single shot. As soon as the weather moderates they return to their feeding-places on the beach and sands. They are at times very numerous about Shoreham, and were so at Pagham before the mud flats were reclaimed; Rye Harbour was another favourite resort. They feed on small bivalves and other shellfish, and were formerly fattened for the table on bread and milk. In the breeding-season they retire to the Arctic Regions, where Parry's Expedition found them breeding numerously on what were then called the North Georgian, but are now known as the Parry Islands, and again, on July 30th, 1876, an old bird, accompanied by three nestlings, was obtained on the border of a small lake not far from H.M.S. "Alert." The old bird proved to be a male; its stomach and those of the young were filled with insects (*vide* 'Ibis,' 1877, p. 407), and, according to Yarrell (vol. iii. p. 416), Mr. H. Chichester Hart, naturalist to H.M.S. "Discovery," obtained, in $81^{\circ} 44'$ N.L., a brood

of four, disturbed from the nest on the 11th of July. This was placed under a large flat stone, resting on two others, forming a sort of gangway. It was merely composed of reeds and grass, loosely laid together on the earth by the edge of a stream, but no trace of the egg-shells were found. These were several miles inland. At this season of the year the Knot soars high in the air like the Common Snipe, and when descending beats its wings behind the back with a rapid motion, producing a loud whirring noise. In the north these birds feed eagerly on the *Saxifraga oppositifolia*.

SANDERLING.

Calidris arenaria.

THIS little wader first appears early in May, on the spring migration, and stays two or three weeks, occasionally as late as the first week of June. Flocks of old and young return about the end of July, or beginning of August, on their way southward.

In October great bodies of them may be seen flying to the westward. As the name implies, the Sanderling feeds on the sea-sands, probing for its food, which consists of small worms and crustacea, after the manner of the Snipe. In the breeding-season it eats also the buds of *Saxifraga oppositifolia*. It is found along the whole coast, especially at Worthing, Pagham, Sidlesham, and Bosham.

In the Arctic Regions, where it breeds, the eggs were first fully identified by Mr. McFarlane, when collecting for the Smithsonian Institution, near the Anderson River, and the German Arctic Expedition met with similar nests on the east coast of Greenland.

Professor Newton obtained an egg in Iceland, and Colonel

Feilden, naturalist to H.M.S. "Alert," found ten on Sabine Island, in Smith's Sound.

A nest found by the last-named naturalist was placed on a gravel ridge, a hundred feet above the sea, in a slight depression in the centre of a recumbent plant of willow; the lining consisted of a few withered leaves and some of the last year's catkins. Another, found on Anderson River, was composed of hay and decayed leaves (see Yarrell, vol. iii. p. 23).

RUFF.

Machetes pugnax.

THE Ruff cannot be called common in Sussex, and all which have been met with have been in winter plumage. It may now be considered as an accidental visitor, though it formerly bred in Pevensy Levels till it was banished by the extensive drainage. Numbers were formerly found in the fens of Cambridge and Lincolnshire, and on Romney Marsh, in Kent, whence the eggs were given me many years ago.

In the breeding-season the males assemble at "*lekking*" places, locally called "hills," like the Black Grouse and Capercallie, and fight desperately for the females.

The nest is generally placed on a tussock in the wettest part of a swamp. The food consists of insects, larvæ, worms, and, occasionally, of certain seeds, and its note is a low "Kack-Kick-Kack."

The late Mr. Knox records (O. R., p. 234) a curious capture of a Ruff, in a clap-net, near Hove, being apparently attracted by a Lark which was used as a call-bird. I see,

by my own notes, that this was in September 1843, and that an adult male was shot near Eastbourne, on March 11th, 1840.

Mr. Jeffery (p. n.) mentions one shot at Appledram, April 24th, 1861, another at Pagham Harbour, October 1863, and that three were seen at Sidlesham, August 24th, 1864, and one shot a day or two before at Pagham, two more in 1873 at the same harbour, and, lastly, two at Sidlesham, March 2nd, 1887. In the 'Zoologist,' p. 4258, s. s., is recorded a Reeve, obtained near Eastbourne, on September 21st, 1874.

Mr. Harting informs me that twenty years ago, when Pagham Harbour was a paradise for shore birds in spring and autumn, and for wildfowl in winter, he used often to come across the Ruff and Reeve there in August and September. They were never in flocks, but in little parties of five or six birds, and the males had then entirely lost their frills. He never observed them there in spring, which indicates that they returned northward at that season by a different route. This he observed to be the case also with the Grey Phalarope.

BUFF-BREASTED SANDPIPER.

Tringites rufescens.

A VERY rare visitant to Sussex, being in fact a straggler from N. America. According to Yarrell (B. B. vol. iv. pp. 437-8) its summer haunts are in the Arctic portions of the American continent, and its food consists of land and marine insects, particularly grasshoppers. Mr. Dresser found it in Mexico, and the birds were there very fat, and

excellent eating. They preferred the sandy plains and the dry tracks of the cotton teams. The call-note was low and weak. The nest is placed in a slight depression in the ground, lined with a little grass or a few leaves.

In the 'Zoologist' for 1843 the late Mr. F. Bond, in a note dated March 28th, stated that a specimen of the Buff-breasted Sandpiper, obtained on the Sussex coast, had lately come into his possession. Not more than fifteen specimens have been recorded as having been met with in the British Islands.

BARTRAM'S SANDPIPER.

Bartramia longicauda.

THIS is another American species, whose visits to this country are exceedingly rare. Of the habits of a specimen killed at Low Stead, in Northumberland, Mr. Bolam writes (see Yarrell's B. B. vol. iii. p. 44) :—"It was in the habit of frequenting the long grass or 'bents' with which the links at Low Stead are covered, and Mr. Henry Grey . . . informs me that it was not at all shy, and, when amongst the tall grass, lay like a Snipe or Woodcock, allowing him to approach within a few yards of it before rising. . . . and after flying for a short distance . . . it would again drop into the long grass, or, alighting on the bare sand, would run off to some convenient place of shelter. When surprised in the open . . . it ran very swiftly, frequently stopping behind a stone, or, after it had got some distance from him, standing on a slight hillock or other eminence, and watching his movements, its tail, all the while, moving up and down with a peculiar swaying motion not observable in any other of the Sandpipers.

Its note, uttered for the most part when flying, was a shrill piping whistle."

On p. 444, *op. cit.*, Dr. E. Coues states that the nest is a depression of the ground, with a leaf or two, or a few blades of grass. The food of this bird is principally grasshoppers and other insects, especially beetles, and berries. It is stated to be always fat, and delicious eating.

Mr. Dutton, of Eastbourne, states in the 'Zoologist,' p. 9118, that he purchased at a sale of birds belonging to the late Mr. Wille, of Lewes, a beautiful specimen of Bartram's Sandpiper, shot at Newhaven sometime between 1836 and 1840. This is the first instance of the occurrence of this species in England on record.

COMMON SANDPIPER.

Totanus hypoleucus.

THIS species, known also as the Summer Snipe and the Wagtail, is migratory, making its first appearance in April, and remaining till the end of September. It is seldom met with on the sea-shore, but frequents the river banks, and those of most of the larger ponds throughout the county; and is said occasionally to breed with us. I cannot, however, confirm this, except that I once picked up a single egg, which I still have, on a little strip of pebbly sand, left by the tide of the Adur, but although I then watched a pair of these birds for a long time, and again on the next day, I failed to find the nest. When wounded I have seen the bird swim and dive well, and it is then very difficult to catch. It is very good eating, especially when potted. As it is generally seen in pairs, it seems very strange that the nest

has been so seldom met with in the county. Mr. R. Gray, in his 'Birds of the West of Scotland,' p. 297, states that on the banks of the Clyde he has even seen the bird making its nest in flower-pots, under bushes, and among growing plants, frequently in turnip fields. It is very cheerful and lively, generally running from stone to stone very rapidly, perching on one of them, and wagging its tail up and down, uttering the while a few soft piping notes, which it also does while on the wing. I once found the nest by the edge of Bala Lake in N. Wales, constructed of little pieces of some dead water-plant, a quantity of which had drifted along the margin of the lake. The stomachs of several which I shot on the banks of the Adur were filled with minute freshwater shrimps, and small univalve mollusks, chiefly *Turbo ulvæ*.

SPOTTED SANDPIPER.

Totanus macularius.

Of the occurrence of this American species in England there are but few instances recorded. Of these two were shot in Sussex, near Eastbourne. At the request of Mr. J. H. Gurney, I went there and ascertained from Mr. Bates, naturalist, that they had been shot at the Crumbles pond, near that town, in October 1866. One of them was purchased by Mr. Gurney, and the other Mr. Bates retained, declining to let me have it. The habits of this species are said to be so similar to those of the Common Sandpiper that the description of that species will equally apply to this.

GREEN SANDPIPER.

Totanus ochropus.

THE appearances of this bird are so erratic that it is impossible to say when it arrives or departs. I have myself shot or seen generally single birds, and twice three together, in April, May, August, September, October, and November, and it can neither be called common nor rare. Nearly all I have met with have risen from some little insignificant pond or pool, dug in the meadows for the watering of the cattle. It also frequents streams in woods, and the banks of rivers and brooks at a distance from the sea.

When disturbed it goes off with a flight like that of a Snipe, but generally silently, though I have occasionally heard it utter a triple piping note. I have never met with or heard of it on the coast, and there is no known instance of its breeding in Sussex. Where it does breed it is said to lay its eggs in the deserted nest of some other bird, sometimes in a tree at a great height from the ground. Mr. Knox (O. R. p. 230) makes this statement:—"In June 1813 I observed four on the borders of a pond through which ran a clear trout stream at Cocking, near Midhurst. ... When disturbed at the pond the birds used to retire into the great woods in the immediate neighbourhood." Mr. Harting, in his 'Birds of Middlesex,' p. 175, observes that it is more sluggish in its movements than the Common Sandpiper, and that "it bores for its food, which consists chiefly of small beetles, as well as spiders, very small red worms, and woodlice."

The only specimen recorded as having occurred in Sussex in July is that noted by Mr. Jeffery, who met with one near Chichester, in that month in 1863.

Markwick, in his Catalogue (Linn. Trans. vol. iv. p. 21), writing of the Green and the Wood Sandpipers, says, "These birds agree so nearly in size, mode of living, and other respects, that they are with the greatest probability supposed to be only varieties of the same species, perhaps male and female."

WOOD SANDPIPER.

Totanus glareola.

This species is much rarer than the last. With the exception of June and July, when it departs to its breeding-quarters on the Continent, it may be occasionally met with at any time, in various parts of the county, rarely on the sea-shore, occasionally in streams running through woods, but more frequently on open marshes or bogs. I find from my own notes that Mr. Ellman informed me by letter that he obtained a specimen in August 1851, at the Tide Mill, near Newhaven; in the 'Zoologist' (p. 3279), speaking of the same example, he says it was in company with some Dunlins, and when they rose it remained alone, thereby attracting his attention and leading him to shoot it. About the same time I saw at Mr. Swaysland's two others shot near Shoreham. On August 16th, 1862, Mr. Smith shot a pair on Henfield Common, and gave me one of them. It was, however, too high to preserve. The other fell in an inaccessible part of the bog and was unfortunately lost. The two were together and uttered a sharp note on the wing. Another was obtained on the same common on August 17th, 1868; it was alone, and is now in my collection. I have seen one of these Sandpipers, which was shot near a pond

at King's Farm, Cowfold, but cannot give the date. Mr. Knox (O. R. p. 231) states that Mr. Swaysland informed him that four were secured near Worthing, in September 1851.

Mr. Jeffery, in his p. n., mentions one shot near Pagham, on October 10th, 1864, and another, at the same place, in August 1865, which was sent to Chichester Museum; another, also at Pagham, in 1866, and a fourth at Itchenor, on May 10th, 1880.

With respect to the flight of the Wood Sandpiper, Mr. Hancock, who found the only nest known to have been taken in England, states that it flies in circles, and at every change in the direction of its flight, a musical, sharp, and trilling sound may be heard, which endures for several seconds, at the same time the wings are observed to strike the air with a short, rapid, tremulous motion, which, there is little reason to doubt, causes this remarkable sound. See his 'Birds of Northumberland and Durham,' p. 121. Its food is insects and worms. The nest is placed in the thickest herbage of the marsh, and is very difficult to discover. It does not breed in Sussex.

COMMON REDSHANK.

Totanus calidris.

THE Redshank, generally known to the shore-shooter as the Redlegs, is resident throughout the year, and is one of the commonest species of its genus, frequenting the mud flats of our estuaries in considerable flocks as soon as they begin to be uncovered by the tide; retiring, as the water rises,

to short distances inland, and returning again to their feeding-places with singular punctuality.

It is a very noisy bird. Its cry is extremely musical, and so loud that it may be heard in still weather for upwards of a mile. When feeding on the mud it frequently jumps up in order to thrust its bill with the greater force into it, constantly nodding and bobbing its head and running with great celerity from spot to spot. Its food consists of small worms and crustacea. The Redshank still breeds in a few places in Sussex, such as Pevensy Level, whence I have received its eggs within the last few years.

In Yarrell's B. B. (vol. iii. p. 471) we find the following :—“The nest is well described by Col. W. V. Legge, who says that it is well concealed in the centre of a green tuft of grass, the blades of which are carefully bent over the top, and the openings, by which the bird enters and leaves the nest, being closed up on her quitting it,—only a few tracks in the surrounding herbage betraying its existence.”

It is not now much valued for the table, but we find in ‘The Earl of Northumberland’s Household Book’ (p. 105) :—“*Item*, Redeshankes to be bought at Principall Feestes for my Lordes own Mees after j^d ob. the pece.”

In some Natural History Notes made by Mr. G. O. Rope during his stay at Iken, on the River Alde, in the spring of 1888 (‘Zoologist,’ 3rd s. pp. 327, 328), he states :—“A pair of Redshanks very clamorous to-day (May 16), at the top of the cliff, having evidently young ones close by; they kept alighting from time to time on the top of one of the oaks overhanging the saltings, uttering all the time their loud and impressive alarm notes. It is a common practice with these birds, when they have young about the saltings, to alight on these trees; and should anyone chance to pass nearer than they like to the chicks squatting among the rushes, several pairs of Redshanks may often be seen to-

gether wheeling and screaming about the oaks, and perching from time to time on the upper twigs. Every now and then they dash suddenly to the ground, where, as well as when on the trees, they continually keep up the curious jerking bow, so characteristic of this bird."

SPOTTED REDSHANK.

Totanus fuscus.

THOUGH much rarer than the last described species, the Spotted Redshank has in many instances been met with in the county. Though occasionally feeding on the mud at the mouths of harbours and estuaries, it is more addicted to freshwater ponds inland than the Common Redshank, and is sometimes met with many miles from the sea. From my own notes I select the following instances of its occurrence:—Mr. Ellman informed me by letter that he shot an adult male in autumnal plumage near Eastbourne on Sept. 6th, 1851. In the same month I saw at Mr. Swaysland's two specimens, one shot at Shoreham, the other at Amberley; the latter contained in its stomach a perfect specimen of *Lymnæus pereger*; both had nearly assumed the winter plumage. On August 23rd, 1889, a specimen just changing from the summer to the autumnal plumage was shot by the side of a small pond on King's Farm, Cowfold. This is in my own collection, and is the darkest I have ever met with in Sussex. Mr. Jeffery (p. n.) records one shot on August 25th, 1860, and another on the 14th of the same month in 1863, a third on August 29th, 1861, and a fourth on September 26th, 1866, all at Sidlesham; also one shot at

Pagham, in November of the same year, and an immature specimen on August 10th, 1869.

The nest was first discovered by Mr. John Wolley, and is described by him as placed in the driest situation possible, even on hills of a considerable height covered with forest timber, two of which nests he saw; one was on ground which had evidently been burnt at some former period. They were both nearly at the top of long hills, many hundred yards from any marshy place, among diminutive heather and suchlike plants, growing thinly among reindeer lichen in slight depressions on the ground, and the bedding was only a few dry leaves of Scotch fir. The bird sits very close, and when it rises, either gets up direct or runs a short distance first, and then flies round with an occasional "*tjeuty*," or stands upon the top of a neighbouring tree, showing the full length of its slender legs, neck, and bill.

GREENSHANK.

Totanus canescens.

IN the first week in May the Greenshank makes its appearance on our coast, though it does not remain long before it retires to its breeding-stations, whence it reappears with its young in the beginning of August, and leaves for the winter by the end of October. It is seldom seen in larger parties than from four to six, and is very vigilant and difficult of approach, which makes it by no means a favourite with the shore-shooting fraternity, as it rises with a great clamour and disturbs all the birds within hearing. This cry is uttered in a melodious tone, and is very loud,

resembling the syllables "cherwut, cherwut." It occasionally accompanies the flocks of Redshanks on the mud of the harbours &c., and has sometimes, though very rarely, been found inland by the side of a brook or in a meadow on its borders. Its food consists of insects, fish, worms, and small crustacea. If it comes to deep water while wading it will swim without hesitation, and dives well.

From its wildness it is not often shot, but I have in my own notes mention of its occurrence at Old Shoreham, October 12th, 1838, and two out of four were shot after a very heavy gale from the south-west, on September 19th, 1840; also of one in May, and another on September 15th, 1843. I have also received specimens from Pagham and from Chichester Harbour. Mr. Dennis obtained one, shot in October 1854 near the Cuckmere River, and a few others at various times along the coast.

During the breeding-season the Greenshank will sometimes perch on trees. The nest is described in Yarrell's B. B. (vol. iii. p. 485) as consisting of a few fragments of heath and some blades of grass placed in a cavity scraped in the turf in an exposed place. It breeds in many parts of Scotland.

BLACK-TAILED GODWIT.

Limosa ægocephala.

THE Black-tailed Godwit appears occasionally on our coast on migration, but is much less numerous than the Bar-tailed species. It is in fact a rare bird, and frequents marshy spots inland more than the mud flats, feeding principally on freshwater univalves and mollusks. It bred

formerly on the fens of England, but there is no known instance of its nesting in Sussex.

Mr. Knox states that it has been killed once or twice in an immature state at Amberley, also on Pevensey Levels and the Rye Marshes, and that a male and female, killed at Sidlesham, are in Chichester Museum (O. R. p. 232). Mr. Gordon, in his 'History of Harting,' mentions one shot at Black Rye Pond in the autumn of 1858. Mr. Jeffery (p. n.) records that one was shot on fresh water near Birdham, on August 6th, 1853; another on a freshwater pond near Ashling, August 24th, 1854, containing remains of insects and of marine and freshwater shells, and a portion of fine gravel. A young bird of this year was shot at Pagham, and five more were seen on August 29th, 1865; and one was shot at Bosham on the 4th September, 1867. The nest is concealed in the coarse herbage of the swamps and meadows, and is composed of dry grass and other weeds.

When disturbed they are very vociferous, flying round and uttering a sound resembling "grutty, grutty." Mr. Seebohm, speaking of a nest which he found in Jutland, in his "British Birds" (vol. iii. p. 165), remarks that it was a mere hollow in the short coarse herbage on the dry part of the ground, somewhat deep, and lined with a handful of dry grass.

BAR-TAILED GODWIT.

Limosa lapponica.

THE Bar-tailed Godwit arrives in May so regularly that the 12th is known as Godwit day; but far greater numbers

appear in August, and until they are disturbed they are exceedingly tame; but being much prized for the table, they are persecuted by the gunner and soon become very shy and wary. Formerly they were fattened on bread and milk, and fetched a very high price.

They frequent the mud flats throughout the winter, retiring to the beach at high tides, and feed on various worms, shellfish, and insects, probing for them with their long bills, and sweeping from side to side, and are common all along the coast, but are seldom met with inland. They breed in Lapland, and on the Petchora, and various places in the north of Europe. Mr. Wolley obtained the eggs in Finland. The nest is very slight,—a little dry grass or short herbage placed in a depression in the ground. Mr. J. H. Gurney, jun., in his paper on “The Spring Migration of Birds at St. Leonards” in the ‘Transactions of the Norfolk and Norwich Naturalists’ Society’ (vol. iii. p. 174), observes that a single Bar-tailed Godwit had frequented a small marsh at Bexhill for several days, when on the 10th of May it was joined by twenty-five more, of which about one third were in full breeding-plumage. On another occasion he observed that the Godwits kept apart from the smaller Waders, and that they did not object to the waves splashing them, though they sometimes almost lifted them off their feet.

COMMON CURLEW.

Numenius arquata.

THIS species is found in great abundance on the mud flats in spring and autumn, and at high water the birds retire to the full of the beach, or to a short distance inland. They are

generally very wild, and have always a sentinel on the watch, whose voice is so loud that he gives notice to all the birds on the shore; and it is seldom that a shot can be obtained except by the most careful manœuvring. It is, however, worth some trouble, as the flesh is exceedingly good and fetches a high price in the market.

Willughby mentions that in Suffolk there is a proverb:—

“ A Curlew, be she white or be she black,
She carries twelve pence on her back ”;

and it is one of the luxuries mentioned in the ‘Northumberland Household Book’:—“ *Item*, Kyrlewes to be hadde for my Lord’s owne Mees at Principall Feestes, and to be at xii^d a pece.”

They feed greatly on cockles and on mussels, crustacea, and small shelled snails, especially *Helix ericetorum*. As soon as the rocks begin to show above water a long line of these birds may be seen to arrive, uttering their loud cry of “corlieu.” In April they formerly retired to the South Downs, where I have often observed them, particularly on the wide expanse known as Plumpton Plain, between Ditchling Beacon and Lewes, which was, some fifty years ago, covered with coarse grass, especially *Brachydactyla pinnata*, among which I always thought it must be nesting, from its constantly flying round and uttering an oft-repeated cry of “Wha-up.” I never, however, succeeded in finding the eggs. In the breeding-season it betakes itself to moorlands and open wastes, in the Western, Midland, and Northern Counties, and to the mountains of Wales and Scotland, where it forms a slight nest on the ground, of dry leaves or grass placed in a tuft of rushes.

WHIMBREL.

Numenius phæopus.

A FEW Whimbrels arrive on our coast in April, and in May they become so numerous as to have obtained the name of May-birds, soon, however, departing to their breeding-places. This bird is known also as the "Titterel," and is found in little flocks on the beach at high water, scattering over the mud or sand when the tide is out. Although the main body has left by the end of May, a few may occasionally be met with late in the autumn; for example, Mr. Jeffery records (p. n.) that several were seen at Pagham, on October 3rd, 1864, and one or two are occasionally observed in the summer. Mr. Dennis states that he found one to contain the claws and other fragments of small crabs, and mentions flocks of Whimbrel on the coast near Cuckmere in May. The Whimbrel has a loud clear note, and is very difficult of approach.

It much more often goes inland to feed than does the Curlew, and picks up insects and worms as well as small land shells. At the breeding-season it goes as far north as Iceland. Yarrell (B. B. vol. iii. p. 508) states that Major Feilden found a dozen nests in the Faroes, and that the bird is very pugnacious, driving off even the Common Skua and the Lesser Black-backed Gull, uttering its sharp trilling cry of "Tetty, tetty" while darting to and fro with arrow-like flight.

G A V I Æ.

L A R I D Æ.

THE BLACK TERN.

Hydrochelidon nigra.

THE Black Tern may be considered a rare visitor, occurring occasionally on inland ponds and large pieces of fresh water at a distance from the sea. On August 27th, 1853, I observed a small Tern, which I have no doubt was *nigra*, flying about over the water near the bay of Knepp Pond, or rather Lake, as it consists of about 80 acres, during a very heavy gale from the south-west; notwithstanding which it seemed to be hawking for insects.

Mr. Knox (O. R. p. 253) merely calls it a rare bird in Sussex, and states that it has occasionally been killed at the spring and autumn migrations, or returning from its summer quarters in more inland counties. Mr. Jeffery (p. n.) records one, in winter plumage, shot at Ratham on the 22nd September, 1850; a female and a young bird at Sidlesham, May 5th, 1860, the former in full summer-plumage; and on October 9th, 1865, another young bird at Pagham. In the 'Zoologist' (p. 2803) a specimen is recorded by Mr. Potter, which was shot at Balmer, about six miles from Lewes, where it had been seen hawking for insects, for about an hour, over the surface of a freshwater pond.

Mr. Booth, in his 'Rough Notes,' states that small flocks, flying eastward, usually put in an appearance in the Channel, off the coast of Sussex, during the last week in April, and

that the flight continues throughout May; also that he has repeatedly seen them in the muddy harbours of Sussex.

The Black Tern formerly bred on the marshes about Rye and in the Pevensy Levels, but has long ceased to do so. It also bred in Kent, and in the great fens of Norfolk, Lincolnshire, and Cambridgeshire, from which last locality I still have eggs which were taken in a very wet part of Quy fen about fifty years ago. The nest is placed in a tuft of sedge or rushes in a shallow pool, and lined with pieces of half-decayed water-weeds. The bird feeds on dragon-flies and other insects, as well as on small fish.

Its flight, which I watched with great interest in Holland, is exceedingly buoyant and bat-like.

Several other specimens have been obtained inland, of which I have not the dates.

WHITE-WINGED BLACK TERN.

Hydrochelidon leucoptera.

THIS species is, in fact, much more an inhabitant of the southern than of the northern regions, and its occurrence in Britain is merely as an accidental wanderer, and there appear to be only two recorded instances of its having occurred in Sussex. In May 1873 an adult specimen was killed at South Weighton, near Newhaven, and was preserved for a gentleman residing in that neighbourhood, of which a notice was sent to 'The Field' of November 13th, 1875, by Mr. T. Colgate, jun. A second example is recorded in the same paper of June 19, 1875, by Mr. Clark Kennedy, as killed some few years previously at Eastbourne. The Black Tern and the present species have never been found breeding in company.

Its food, nidification, and general habits, resemble those of the preceding species. The note is said to be harsher and louder.

THE GULL-BILLED TERN.

Sterna anglica.

THE recognition of this very distinct species is due to Montagu, whose type specimen, described and figured by him in the Supplement to his Ornithological Dictionary, was shot by himself in Sussex, and should be now preserved, with the rest of his collection in the British Museum; though the late Mr. G. R. Gray, in his 'Catalogue of British Birds in the Collection of the British Museum,' p. 241, assigned *Kent* as the locality of the only example in that collection enrolled by him. Be that as it may, there can be no doubt that this county (Sussex) furnished the subject upon which this species is based, a fact the more remarkable when its extraordinarily wide range throughout the world is considered. It is not only found breeding in some localities in Europe from Denmark southwards, but apparently across the whole of Asia and its islands to Australia, as well as on the Atlantic coast of America from Connecticut to probably Brazil. At first, Montagu thought that the bird he obtained in Sussex—he unfortunately does not give the precise locality or date—was an example of the Sandwich Tern, which species had not long before been described by Latham; but on becoming the possessor of his type specimen of that species, which should now be in the British Museum, Montagu, of course, saw how very distinct they were, and accordingly did not hesitate to describe the present one as new. From his statement that

not only had he shot his original specimen in Sussex, but that he had known others killed about Rye, we might be entitled to infer that the Gull-billed Tern may have in those days bred on our shores ; but perhaps it might be safer not so to do, even though we might be tempted to adopt the contrary belief, from an assertion of the late Mr. Rodd ('Birds of Cornwall,' p. 166) that a private collection at Penzance contains a bird of this species, presented by Mr. Rice of South Hill, together with a portion of an egg which dropped when he shot the bird near Brighton. I find in my own notes that in the first week of May, 1855, a very perfect specimen, in full summer plumage, was shot halfway between Shoreham and Brighton. On examining this example I found that the head was not jet-black, as described by Yarrell, but glossed with the same green colour which pervades the plumage of the Crested Cormorant. This specimen was preserved by Mr. Pratt, of Brighton. Mr. Knox records (O. R. p. 253) that he has a specimen killed at Rye, and there is another in the Chichester Museum which was obtained at Selsey on March 31st, 1852. Mr. Yarrell (B. B. vol. iii. p. 534) says that the Gull-billed Tern breeds on islands or sand-banks in lagoons, the nests being merely slight hollows, with, at times, a few bits of sea-weed or dry grass for a lining, and that its food consists of frogs, crabs, and fish ; that it feeds also on grasshoppers and beetles, which it captures on the wing, and that the flight is very graceful, though not very rapid. It is partial to lakes of fresh or brackish water, and forms a natural link between the Marsh Terns and those which frequent the coast. A Gull-billed Tern was shot out of a party of three, near Portslade, and was preserved by Mr. Pratt, of Brighton, June 27, 1855.

THE SANDWICH TERN.

Sterna cantiaca.

THIS Tern may be seen on our coast every spring, though it is never very numerous. Arriving in April, it remains the greater part of the summer, and may be met with occasionally all along the shore. It does not now breed in the county, though formerly the eggs were not unfrequently found on the extensive tract of beach in the neighbourhood of Winchelsea and Rye. It now goes further north in the breeding-season. The nest consists purely of a depression in the sand, or occasionally it is placed among the drifted sea-weed above high-water mark.

The voice is powerful, and may be heard from a great distance, resembling the words "kirhitt, kirhitt." The bird feeds on insects and small fish. In my own notes I have the following:—"A Sandwich Tern was shot off Brighton in the first week of April 1844, in full summer plumage: another similar specimen near Shoreham in the beginning of May 1866." Mr. Knox (O. R. p. 243) says that specimens have been obtained at Pevensey, Rye, and Selsey, in May and June, and in the autumnal months. Mr. Jeffery (p. n.) mentions an immature bird, a female, shot at Pagham Harbour, on October 12th, 1861, and an adult male at Sidlesham on May 11th, 1863.

ROSEATE TERN.

Sterna dougalli.

THIS is the most elegant, as well as the rarest, of our native Terns. I can find but one record of its having visited the Sussex coast, viz. that of Mr. Southwell, of Norwich, in the 'Zoologist' for 1885 (p. 481), stating that a specimen in the collection of Mr. Rising, of Horsey, near Great Yarmouth, was shot on the Sussex coast, near Eastbourne, about the year 1848. At the sale of this collection in September, 1885, the bird was purchased by Mr. Ashmead, the taxidermist of Bishopsgate Street, London.

This Tern formerly bred on one of the Scilly Isles, and more lately on the Farnes, as well as on a few islands off the coast of Scotland and Ireland. Though it has a very wide range, its diminution at all its breeding-quarters leads one to fear that it is doomed to become an extinct species.

COMMON TERN.

Sterna fluviatilis.

THIS is the most abundant of all the Terns on the coast of Sussex, known also as the Sea-Swallow, and is a constant summer visitant. Our rivers not being sufficiently large to induce it to go far inland, it is, with us, rarely met with far from the sea.

It occasionally occurs, however, on some of the larger pieces of water, feeding principally on small fish. On the

18th of September, 1839, there being a very large flood on the Henfield Level, I observed several of this species flying over the water, and was much interested in watching the perseverance with which they beat against a strong gale till, arriving at a certain point, they would at once turn and dart before the wind with immense velocity to the furthest extremity of the water, and again beat up, although the wind was so strong that they sometimes appeared almost stationary; and this they did for an hour or more, when I left them. On the same day a solitary bird was shot on the River Ouse, at Lindfield, at least fifteen miles from the sea.

Mr. Jeffery states (p. n.) that after a heavy gale eighteen of these birds were shot in Chichester Harbour on April 18th, 1866; one of them, which he examined, contained fourteen or fifteen common shrimps. Mr. Jeffery also mentions that one was shot over a small pond at Ashling, where it was so intent on catching small gold-fish that it would not be driven away, and was found on examination to contain five or six of them. The Common Tern formerly bred on the beach from Rye Harbour to beyond Winchelsea, and a few continue to do so. The nest is a mere shallow hole scratched in the sand or shingle or placed among the drifted sea-weed, and lined with little pieces of sea-thrift or dry grass.

ARCTIC TERN.

Sterna macrura.

THE Arctic Tern is frequently seen in company with the Sea-Swallow. On the 18th, 19th, and 20th of May, 1842, a continuous stream of small flocks of the former species passed all along the coast of Sussex. There must have been several thousands of them, and many hundreds were wantonly shot from the beach, especially at Brighton. I well remember hearing of numbers having appeared on the Cam from Cambridge to Ely. In fact, this extraordinary visitation appears to have been general. In the Ann. & Mag. Nat. Hist. (pp. 352, 353) it is stated by Mr. H. E. Strickland that these birds were abundant at Clevedon, Weston, and Bristol, at which last place more than two hundred were killed; also that on the 8th and 9th of May one bird-stuffer at Evesham received no less than forty specimens, and that considerable numbers were obtained at Tewkesbury, Worcester, Hereford, Devizes, and Trowbridge; and that he was informed that seven hundred were seen at Crofton Hall, near Bromsgrove. Numbers also appeared at Swansea, Mounmouth, and Bridgewater, as well as in Dorsetshire and Cornwall.

In October 1843 several adult birds and a young one were shot near Shoreham. Mr. Jeffery (p. n.) remarks that a large flight of Arctic, Common, and Lesser Terns were seen swimming in Pagham Harbour on October 11, 1865.

Mr. Knox states that the Arctic Tern is more numerous in May and June on the shingle at Pevensey than the Common Tern. Mr. J. H. Gurney states, on the authority of

Mr. Dutton, that he believes it still breeds near St. Leonards, that there is a considerable colony at Pevenscy, and that with the help of a dog, without which it is almost impossible to discover them, he found eight nests of three eggs each and three with only one. Its food and habits are similar to those of the Common Tern.

LESSER TERN.

Sterna minuta.

THIS, the smallest of our British Terns, is not very plentiful, though it occurs all along the coast and breeds with us in a few places, particularly in the eastward portion of the county, making its first appearance in May. It feeds on surface-swimming crustacea and small fish, on which it pounces while on the wing.

It is occasionally met with off Shoreham and Worthing, and there is a colony at Rye. Mr. Jeffery notes that on May 9th, 1864, five were shot in Pagham Harbour, and that he had examined an immature specimen shot at the same place, and found it crammed with small fish. He also says that on May 20th, 1866, four were shot at Sidlesham, and on the same day thirteen were killed there at two shots. Its habits and the situation of its nest are similar to those of the Common Tern. In large floods and in heavy gales it is now and then found on fresh water at a considerable distance from the sea.

SABINE'S GULL.

Xema sabinii.

THIS Gull is a rare straggler to the British coast, being an inhabitant of the polar regions. It was first noticed by Captain, afterwards General Sir Edward Sabine, when accompanying one of the expeditions in search of a North-West passage, on a group of low rocks on the west coast of Greenland. It gets its food on the sea beach, standing near the water's edge, and picking up the marine insects which are cast ashore. See Mr. Dresser's 'Birds of Europe,' vol. viii. p. 338.

In the severe weather of December 1853, a specimen of this Gull was obtained by the gardener of Mr. Catt, at the Tide Mill, near Newhaven; it was an immature bird, and was recorded by me in the 'Zoologist' (p. 4408). Another immature specimen was picked up in a dying state at Hove in September 1871; on examination there were no shot-marks found on the skin, and as it was in good condition, it seems probable that it had flown against some object. It is now in my own collection. Mr. Dawson Rowley records another in the same plumage, shot at Hove during a severe equinoctial gale on October 7th, 1858; and lastly one is mentioned by Mr. Harting in his 'Handbook of B. B.' on the authority of Mr. J. H. Gurney, as killed near Eastbourne, October 18th, 1870. In addition to the above I am informed by Mr. Pratt, of Queen's Road, Brighton, that he had received one, killed at Black Rock, near that town, and two from Portslade.

BONAPARTIAN GULL.

Larus philadelphia.

THIS exceedingly rare straggler has only once occurred on the coast of Sussex, and was first noticed by Mr. Cecil Smith, of Bishop's Lydeard, Taunton, while looking through the collection of Mr. F. Perschouse, of Torquay. It was in the same plumage as that of the centre figure in Yarrell. The following is Mr. Perschouse's account of its capture:—"It is some years since I shot it, and I cannot supply the exact date, but it was early in November 1870, at St. Leonards-on-Sea, at the west end of the promenade. It was with a number of Black-headed and Kittiwake Gulls, and I mistook it at first for *L. minutus*. It is an immature specimen." ('Zoologist,' 1883, p. 120.) It was reported in the 'Field' of April 14th, 1888. Mr. Perschouse showed me this example when I was at Torquay. I think it was in 1872.

LITTLE GULL.

Larus minutus.

AN immature specimen was shot by Mr. Dennis on October 16th, 1846, as it passed over his head, while on the beach at Seaford, on the western side of the bay, after a heavy gale from the east. It was then thought a very rare bird.

I purchased a Little Gull which had been shot near Lewes on the 29th of November, 1849, in winter plumage, and nearly mature; and in the same winter Mr. Dennis obtained

an immature bird, which I saw at the Rectory at East Blatchington. It was brought to him alive, and covered with wet blood, by a coastguardsman who had shot it at Seaford. It had, however, quite recovered and was very tame, readily taking raw meat from the hand, and would scold at a great rate if not attended to. It had learned to beg for food, and was just getting into mature plumage, when it was accidentally killed by the slamming of a door on June 16th, 1850. A coloured drawing of this specimen was sent to Mr. Knox by Mrs. Rickman, of Lewes. See O. R. p. 254, where is mentioned another example which was shot by a fisherman near Brighton on November 10th, 1853, and preserved by Mr. Swaysland. Mr. Jeffery (p. n.) records one, now in Chichester Museum, shot December 1st, 1868; another at Chidham, January 1st, 1870; one at Selsey, February 1874; a fourth at Fishbourne, December 1876; a fifth at Pagham, January 1877; and a sixth at Itchenor on December 1st of the same year. Mr. Dresser (vol. viii. p. 378) states that it was very common at Novaya Ladoga in 1852, breeding on small floating islands in a morass. In the stomachs were found insects which they caught in the air, making graceful and quick evolutions, in which they almost surpassed the Goatsucker. In a marsh in the same neighbourhood were found by Mr. Meves nests similarly situated among low plants, often quite close together, of which some were placed on the edge, and others in the centre of the islands, and composed of flags, scirpus, and grass-straws, some carefully, others carelessly constructed. On examining the birds it was found that they had been feeding principally on small fishes and on a few insects.

BLACK-HEADED GULL.

Larus ridibundus.

THIS Gull is exceedingly abundant on all parts of the coast throughout the winter, but does not now breed in the county. It feeds greatly on the cultivated land, where it follows the plough, as the Rooks do, in search of grubs and worms.

The nearest breeding-places are on Romney Marsh, in Kent, and in the neighbourhood of Poole Harbour, Dorset, but the greater part go to the meres of Norfolk, Lincolnshire, and Yorkshire, where they assemble in vast numbers, and whence their eggs are every year sent to the London market.

In some seasons from ten to twenty thousand eggs have been taken. In 1825 they fetched, according to Yarrell (vol. iii. p. 597), 4*d.* a score; and in 1870 they were sold on the spot at from 9*d.* to 1*s.* the score. It breeds in many other counties of England and Scotland, and as far north as the Shetland and Färoe Isles. Its note is a hoarse cackle resembling a laugh. It feeds on crustacea and fish on the coast, and on any floating garbage, mollusks, and insects, frequently visiting pastures, where it finds the crane-fly, of which it is particularly fond. It also catches chafers on the wing, and will feed on mice and small birds as well as on corn.

The flight is very beautiful and buoyant. Not long ago I was much interested in watching the evolutions of these Gulls on the Caledonian Canal, where they followed the steamer from Inverness to Fort Augustus. This is also called the Peewit Gull.

On the 23rd of February, 1853, I received a so-called Masked Gull, *Larus capistratus*, which had been taken alive off Brighton, on a hook baited with liver. I turned it down on my pond, hoping to observe its changes of plumage. On the 21th of April in the same year I find this note:—"The Gull caught off Brighton, February 22nd, has this day completed its change from the winter to the summer plumage, having assumed a black, or rather dark brown semi-hood on the upper part of the head, not extending backward beyond the eyes—the back of the head, as well as that of the neck, remaining pure white." It fed well on barley and oats. By the 4th of August it had assumed a few speck-like white feathers round the eyes, and they remained unchanged till late in the month of September, when it resumed its winter plumage, the same as when I first received it. The next spring the changes were similar, but on December 4th, 1854, I was sorry to find it dead and nearly eaten by a Great Black-backed Gull, by which it had never before been ill-treated, having lived with it in amity for many months.

[Respecting the Laughing Gull, *L. atricilla*, which was admitted as a British species in the three former editions of Yarrell, I find the following among some notes kindly lent me by Mr. Thomas Parkin, of Halton, Hastings:—"At a meeting of the Zoological Society, held early in March 1884, Mr. Howard Saunders made some observations on the specimen of *L. atricilla* in the British Museum, said to be the one killed by Montagu at Winchelsea, and came to the conclusion that the bird in question was not that of Montagu." Accordingly, in the last edition of Yarrell (vol. iii. p. 606), he states that it was admitted into the British list

owing to a misapprehension on the part of Montagu and his contemporaries.

Rhodostethia rosea.—Respecting the so-called Ross's Rosy Gull, recorded by Mr. Ellman ('Zoologist,' p. 3388), the specimen was shown to me, and I told him that it was merely an unusually rosy example of *L. ridibundus*; but as he was not satisfied, I, to satisfy him, took it to the British Museum, thinking to compare it with others. There was, however, no specimen of Ross's Gull there, but Dr. John Edward Gray quite agreed with me that it was *L. ridibundus*.]

COMMON GULL.

Larus canus.

THOUGH called the Common Gull, it is not nearly so abundant as the Black-headed Gull, but from autumn to spring it may be found along the coast, more particularly about the harbours, where it may be seen picking up the floating refuse among the shipping. It also follows the plough, like *L. ridibundus*, and feeds on similar substances. In confinement it may be kept in good condition on maize, barley, or wheat. In heavy gales it is sometimes driven far inland. Yarrell describes the nest as large, whether on marsh or rock, and constructed of sea-weeds, heather, grass, and sea-pink. On some of the Scotch lakes I have observed it perching on trees.

HERRING-GULL.

Larus argentatus.

IN the mature state this Gull is known on some parts of the coast as the "Cob," and in the immature as the "Grey Cob" or "Wagell," and is perhaps the commonest of the genus all through the summer. It feeds greatly on grain, often doing considerable damage by digging up and devouring the corn just as it is beginning to sprout, and is said in very hard weather to bite out and devour pieces from the turnip roots. It also eats fish, mice, small mussels, &c., and is a great destroyer of eggs in its breeding-places, even pillaging the nests of its congeners. It often goes far inland for food, following the plough, or turning up the soil of the newly-ploughed fields.

The Herring-Gull is a dangerous pet, as it will murder any of its companions it can master, and eat them too.

The nests are generally formed of dry grass and sea-weed. These birds are frequently seen to trample the sand, probably to make the worms rise to the surface. Large flights often follow the herring-boats in the Channel to pick up the refuse fish and crustacea, which are thrown overboard after a haul, and on these occasions they are very noisy and quarrelsome. Unless this is the reason, it is difficult to say whence the name of Herring-Gull is derived, as that fish does not seem to be an especial favourite with this Gull. It is frequently seen to take up cockles, mussels, &c., to great heights in the air, dropping them on the rocks to break the shells.

Having kept some of these birds for several years, I had

an excellent opportunity of observing their notes, of which they have a considerable variety, at times resembling the bark of a small dog, at others the mewing of a cat in distress; this is uttered with the neck stretched out horizontally, close to the ground. It has also a note much resembling the sharp cry of an Eagle; the head and bill are then pointed straight upward toward the sky, the bird raising itself to its full height, and stretching up its neck to its greatest length. It is very dexterous in catching insects, both on and in the water as well as on the wing. It was very amusing to watch these Gulls sitting round a Duck whilst she was laying her egg, which was no sooner done than one of them would stick his bill into it and run off, till one of the others overtaking him, he would drop it, and it would be seized by another, till the egg was broken, when there was a general fight for the contents. This Gull breeds in small numbers in the cliff near Newhaven. I am informed by Mr. Bates, naturalist, Eastbourne, that it breeds also on the cliff just to the westward of Belle Tout Lighthouse.

LESSER BLACK-BACKED GULL.

Larus fuscus.

MR. KNOX calls this Gull far from common, and says that a few breed at Newhaven; I do not think it now breeds in the county, and I doubt whether it does so anywhere on the south coast. It is certainly not so numerous as the Herring-Gull, and it spends the greater part of its time further out at sea, where considerable flocks attend the herring-boats, even pulling the fish out of the nets, and being so troublesome that Mr. Booth tells us he has been

requested by fishermen to shoot them. A few may occasionally be seen about Brighton, especially attracted by the fish which are lost on the unlading of the boats; and at the great outfall of the Brighton sewage, a couple of miles or so east of the town, large numbers are often seen picking up the floating garbage. They are said to be much more partial to inland lakes than the Herring-Gull, and, as with the other larger species of Gull, birds in immature plumage are more common than adults. In confinement they will do well on greaves and maize, and are fond of mice and small birds, which they always swallow whole, having first dipped them in water. Mr. Booth mentions that in Caithness large numbers nest on the dampest part of the flats in the central portions of the county, or on the rocky ledges of the north-west, and on the stretch of marsh land surrounding the inland lochs and pools in the outlying islands. He also states that he fully believes that this Gull does not attain its mature plumage until five years old.

GREAT BLACK-BACKED GULL.

Larus marinus.

THIS noble Gull may be found at all seasons round our coast, and frequently goes far inland, especially in rough weather. On November 20th, 1854, one of these birds was brought me which had been taken alive on Broadmere Common, near Henfield, with its feet and bill so clogged with the tenacious Wealden clay that it could not rise from the ground. It was an adult, in the finest winter plumage; it seemed perfectly unconcerned, and would eat any flesh

which was thrown to it. I only kept it a few days and restored it to the man who caught it, fearing it might maltreat some of my other pets if turned down with them. This Gull has been accused of attacking young lambs or weakly sheep, but of this I have no proof, and I have never heard of its interfering in any way with the vast flocks of sheep on the South Downs. It feeds on the foulest carrion, dead fish, or any wounded bird it can find, often attending the gunners when in search of wildfowl. It may be easily caught in traps baited with a piece of flesh. On the coast it forms a roughly constructed nest, on the upper ledge of a cliff, or in a cavity among the bare stones, composed of coarse herbage and sea-weed, or on the islands of a loch, or on the open moor.

GLAUCOUS GULL.

Larus glaucus.

A SOMEWHAT rare visitant to our coast, though from time to time a considerable number have been met with.

I have a note that, in December 1852, Mr. Dennis had a specimen brought him which had been taken at Seaford, which so severely bit the man who caught it that he refused to touch it again, and Mr. Dennis had to get the bird into a basket; it was in not quite mature plumage. Another of my notes records that at the beginning of January 1859 an immature specimen was shot off Shoreham. This bird was flying very high, in company with two others which appeared to be similar.

Mr. Knox mentions (O. R. p. 255) an immature bird taken by a boy from the Chain Pier at Brighton, by means

of the *click*, which consists of a piece of cork rudely fashioned after the likeness of a fish, over which is spread the skin of a mackerel, from which the hooks project, baited with morsels of liver, a long line being attached to it and allowed to float with the tide—many Gulls of different species being taken in this way every year.

Mr. Booth mentions that he saw a mature Glaucous Gull flying between St. Leonards and the sea, and that on the following day a specimen exactly resembling it was brought to a bird-stuffer in that town, which had been shot on the large expanse of shingle that stretches along the shore adjoining Pevensy Level. Mr. Jeffery notes one which was shot at Selsey, in January 1870, and passed into his collection; another, now in Chichester Museum, shot at the same place January 15th, 1873; and in 1882, in the same month, an immature specimen obtained at Itchenor.

In the 'Zoologist' (p. 6606) Mr. Wilson has recorded one killed at Worthing in December 1857, with no remark. The Glaucous Gull being a comparatively rare winter visitor, I give from Mr. Dresser's 'Birds of Europe' (vol. viii. p. 437) the following description of its habits, which, he says, assimilate closely to those of the Great Black-backed Gull. Like that species, it is extremely voracious, and commits great depredations amongst the eggs and young of other sea-birds and water-fowl, and, to a large extent, it feeds both its young and itself on the eggs and nestlings in down of its weaker neighbours, and renders itself a perfect pest to them. The young of the Eider, and of several other of the sea-ducks, are looked on by it as tender morsels; and in places in the extreme north, where these birds breed in large numbers, the Glaucous Gull is almost sure to be present, devouring many of the young, pouncing down on and catching them just as it requires them. It doubtless also catches the smaller species of mammals, and waits to take possession of the remnants

left by the seal-hunters when they have cut up a seal; wherever the carcass of a whale or seal is cast ashore, these Gulls collect together, like vultures, to regale on it. The call-note, or cry, of this species closely resembles that of *L. marinus*, as does also its flight; but where the two species are found they keep apart in separate flocks. In its native Arctic regions, it pertinaciously follows the whaling-ships, feeding greedily on the blubber.

ICELAND GULL.

Larus leucopterus.

THIS is even rarer as a visitor than the last-described species. An immature specimen is said, by Mr. Knox, to have been shot near Pagham in January 1852, which was placed in Chichester Museum.

In December 1889, or the following month, an Iceland Gull, also immature, was brought to Mr. Pratt, which had been shot at the outfall of the Brighton sewage at Bolsover. Of its habits little has been recorded. Mr. Saxby, in his 'Birds of Shetland,' p. 337, observes that this bird "seems to be partial to vegetable food, often resorting to the fields, where it may not seldom be seen near the pigs, which in Shetland are tethered by long ropes fastened to a stone or to a stake in the ground. Possibly the earth-worms rooted up may be an attraction. In the stomach I have found a considerable quantity of oats and vegetable fibre, with numerous small pieces of quartz." It breeds plentifully in Greenland, and also in North America, laying its eggs in a mere depression scratched in the ground.

In the 'Field,' April 10th, 1890, Mr. G. H. Nelson records

that he shot an Iceland Gull, at Beachy Head, on January 21st, 1880.

It requires very careful examination to distinguish the young of this species from that of the Glaucous Gull. I have no doubt respecting the example received by Mr. Pratt, as mentioned above. The specimens of the Glaucous Gull often vary greatly in size.

KITTIWAKE GULL.

Rissa tridactyla.

THE Kittiwake frequents our coast throughout the year, but is most abundant in spring and autumn, feeding on surface-swimming fish and crustacea. In heavy gales, and when the sea is too rough for it, it is often found inland in large flocks, but seldom goes far from the shore in calm weather. It may often be seen following the plough, and some years ago one was caught at Cowfold, with its feet and legs so weighted with clay that it could not rise;—this is about twelve miles from the sea.

It does not now breed in Sussex, but on many parts of the north and west coasts its nest is placed on narrow ledges of the cliffs, and is formed of sea-weed. Great numbers are usually placed in close proximity.

The plumage is in great demand with the “plumassier,” the barred wings of the young bird being most in fashion.

Mr. Booth states that at Clovelly, opposite Lundy Island, vast numbers were annually slain, and there was a regular staff for preparing the plumage. In many cases the wings were torn off and the live birds thrown back into the water, and this abominable cruelty and destruction, commencing on

August 1st, continued for a fortnight. Hundreds of young birds were left dead and dying from starvation in their nests. On one day seven hundred were sent to Clovelly, on another five hundred, and so on, about nine thousand of these birds being destroyed in the course of this wanton onslaught upon them. The Kittiwake is said to be very good eating. In Yarrell (B. B. vol. iii. p. 654) is found the following:—"In olden times this Gull was considered good food, and Sir Robert Sibbald says that 'The Kittiwake is as good meat as a partridge,' an opinion endorsed in later times by those inhabitants of Scotland who relish Gannets. There is an old story, told by Pennant, of a gentleman who, as a whet to his appetite before dinner, ate *six* and did not find himself a bit less hungry than when he began. Sir James C. Ross says, 'We killed enough to supply our party with several excellent meals, and found them delicious food, perfectly free from any unpleasant flavour.'"

IVORY GULL.

Pagophila eburnea.

THIS inhabitant of the Arctic regions is an extremely rare visitor to our coast. In its native haunts it feeds on the blubber of whales and seals, and on any animal matter, putrid or fresh. The first egg of this bird, the only one in the nest, was found by Sir Leopold McClintock on the beach of one of the Polynia Islands, by him named Ireland's Eye, in latitude 78°, during the Arctic Expedition of 1852-53. He brought this egg to Ireland, and it is now in the Museum of the Royal Dublin Society. He states that the nest was built of moss, with a little white down and a few feathers. See 'Ibis,' 1866,

p. 217. Yarrell (B. B. vol. iii. p. 659) observes that Dr. Malmgren found a number of this species established in the lower niches of the rocks and precipices in Murchison Bay (lat. 80° N., long 30° E.), at a height of a hundred feet; that two nests were reached, and proved to be shallow depressions lined with dry plants, grass, and moss, with a few feathers. Each contained one much-incubated egg, which were placed in the Stockholm Museum, but one of them is now in the collection of Professor Newton. Mr. Knox (O. R. pp. 253, 254) states that it has been obtained twice near Brighton, and that he had seen a specimen at Mr. Johnson's, chemist, St. Leonards-on-Sea, which was found on the beach in a dying state; and mentions that during the winter of 1848 an example occurred near Rye.

Mr. Wilson ('Zoologist,' p. 6606), in a list of birds shot near Worthing, includes "Ivory Gull, 1845," without further notice; and Mr. Ellman, writing in the same journal September 23rd, 1848, says that he saw at a bird-stuffer's at Hastings a few weeks before an Ivory Gull which he told him was shot in that neighbourhood a short time previously (p. 2304).

GREAT SKUA.

Stercorarius catarrhactes.

THE first mention of this species in my notes is that in January 1830 an adult specimen was picked up dead off the Chain Pier at Brighton. It was floating in the sea, and appeared to have been some days in the water, but was preserved for my collection. Another, in good condition, was caught on a hook by a fisherman off Brighton, November 10th, 1846, in perfect plumage, and proved very tame,

almost suffering itself to be taken by the hand; this also is in my collection. A third was caught off Brighton in November 1851; on February 5th, 1880, I saw one flying off Brighton, so near the shore that I could see the white bar on the wing; and on the 7th, a bird, probably the same, was shown me at Mr. Pratt's. It was in good condition, though most of those taken on our coast have been in a somewhat emaciated state. Mr. Knox (O. R. p. 259) states, without further date, that one was caught on the beach at Brighton in November while eating a dead cat, from which it was with difficulty separated; he also mentions another, killed at Worthing, and my bird of 1830.

The Great Skua watches the Gulls feeding, and when one has taken a fish, immediately gives chase, till the persecuted bird is obliged to drop—or if swallowed to disgorge—its prey, and the Skua picks it up before it reaches the water. It feeds also on the blubber of whales and seals, and on flesh and carrion of every kind, which its powerful beak and sharp hooked claws are well adapted for tearing in pieces. The only British breeding-places are in the Shetland Isles. The nest is stated in Yarrell (B. B. vol. iii. p. 665) to be a neatly rounded cavity in the moss or heather of the highest moorlands. It is a very courageous bird, and in defence of its nest or young will attack man or beast.

Mr. Jeffery ('Zoologist,' p. 811, s.s.) records that on February 6th, 1867, one was caught alive, which had lost an eye in conflict with another bird, and was purchased for the Chichester Museum.

POMATORHINE SKUA.

Stercorarius pomatorhinus.

I FIND, in my own notes, the record of an immature example of this Skua, shot at Hangleton by Mr. Hardwick of that place, on October 27th, 1837. In 1841 two more were shot, the one, at Shoreham Harbour, on October 17th, the other, which was immature, at Brighton on November 2nd. The former was moulting, particularly about the head and neck, the long feathers of those parts having lost the greater portion of the straw-coloured tips.

Mr. Dennis, writing in October 1857, tells me that a piece of flooded ground, near Seaford, was visited by a small flock of Skuas, and that he shot two of this species; the mouth of one of them was crammed with earth-worms. He also informed me on another occasion that an adult specimen was shot at Seaford on October 27th, 1858. Yarrell (B. B. vol. iii. p. 668) observes that the first notice of this bird, as British, appears in the Catalogue of Mr. Bullock's collection, sold in 1819, in which was a specimen said to have been killed at Brighton *. Mr. Knox merely remarks that the species had been shot at Brighton, Shoreham, Bognor, Newhaven, and Hastings.

Mr. Booth states that numbers are occasionally seen in the Channel, and that during a terrible gale from the south on October 24th, 1852, a small party of Skuas of this species were blown inland at Shoreham, and settled for a time in a stubble field, and that the whole number were in

* Prof. Newton's annotated copy of this Catalogue shows that the specimen was bought by Dr. Leach for the British Museum, and it is entered in Mr. G. R. Gray's 'Catalogue of British Birds' in that Collection with the locality "North Britain"!

immature plumage. He says that he had seldom met with these birds at any distance from the shore. They seldom attack the larger Gulls, but follow the herring-boats, and rob the smaller ones and the Terns of the fish they steal from the nets. The nest has not been found in Britain.

In the 'Zoologist' (p. 3331), Mr. Ellman notes a pair shot off Hastings in the early part of October 1851; and in the same work Mr. Jeffery gives the following quotation from the 'West Sussex Gazette' of Dec. 28th, 1865, (p. 142, s. s.):—"A few days ago, as a young man named Collins was wheeling a barrow in a lane, loaded with flesh for dogs, he was suddenly startled by the appearance of a large bird alighting on the flesh, and beginning rapidly to make a meal from it. The young man stepped back to the roadside, and took a long piece of string from his pocket, with which to form a noose. The bird had flown a short distance during this operation. Two sticks were placed on the flesh and the noose laid on them. With the end of the string in his hand he stood back three or four yards; the bird soon came again, and stepping into the noose was easily captured. It was kept several days alive, but from being confined in too small a place its feathers became worn." The bird was presented to Mr. A. E. Knox, who, in acknowledging it, wrote that it was the only adult specimen of the species he had ever met with in Sussex, "the breast being of a dirty white instead of the usual mottled brown, which is characteristic of the immature bird."

Mr. Dutton, 'Zoologist' (p. 1099), writes that a few of these birds generally occur in the sprat season in November, and that four, all immature, were shot off Eastbourne in that month of 1867.

ARCTIC OR RICHARDSON'S SKUA.

Stercorarius crepidatus.

AFTER a tremendous gale on September 16th, 1840, one of this species was killed with a stone on the beach at Brighton, in the dark plumage*, and having the middle tail-feathers considerably elongated.

A second but immature example was killed at Worthing on November 2nd, 1841, and on November 5th, 1843, another, in plumage more nearly matured than either of the above, the head and neck being much lighter in colour, and the two middle tail-feathers more elongated. Thus far my own notes. Mr. Dennis informed me that he had killed one on a flooded meadow near Seaford, on October 8th, 1857.

It is the smallest Skua which breeds in the British Islands, the nest being constructed of moss, short grass, and heather, and, like the other Skuas, it defends its eggs with great boldness, and like them, wages a perpetual war with the smaller Gulls. Mr. Booth found it breeding on the moors of Caithness, as it also does in the Outer Hebrides. Hewitson says that the cry of this species at its nest more nearly resembles that of a cat than of a bird.

I have a specimen which was caught on a hook off the Chain Pier at Brighton, in November 1844. Mr. Thorncroft, of that town, records, in the 'Zoologist' (p. 3054), that he killed a Richardson's Skua about two miles from Brighton, on January 24th, 1850; and Mr. Jeffery saw a bird of this species in the flesh, at Chichester, on November 5th, 1873,

* It was from a specimen in this plumage that the well-known Arctic Gull, or Skua, was redescribed as a distinct species under the name of Richardson's Skua.

“with the hair-like yellow streaks appearing on the sides of the neck, and one of the central tail-feathers extending about three inches beyond the rest; the other was missing.” (See ‘Zoologist,’ p. 3823, s. s.)

LONG-TAILED OR BUFFON’S SKUA.

Stercorarius parasiticus.

THIS is the rarest of the Skuas found on our coast. I have one which was shot on a flooded meadow in the Adur Level, near Henfield, in October 1862. It was swimming about alone, and was very tame. This example is in full adult plumage. Mr. Jeffery mentions that in the beginning of October he saw a Buffon’s Skua which was killed at Donnington while flying over some fields; it was in the mottled plumage, the central tail-feathers projecting about an inch. This was in December 1873. He also says that one was obtained in the Manhood, a part of Chichester, in October 1879. This Skua feeds on fish, crustacea, insects, lemmings, and small birds, and on the berries of several plants found on the mountains.

The nest is a mere depression in the ground, with a very slight lining of grass. Mr. Booth says that it probably passes to its breeding-places in April, and that in 1875 he was frequently out in the Channel from six to twelve miles off the Sussex coast, and on several occasions, between the 11th and 23rd of that month, fell in with single birds as well as small parties. A few obtained as specimens were in full breeding-plumage, and others in plumage otherwise the same, but without the long tail-feathers, all being mature.

FULMAR PETREL.

Fulmaris glacialis.

THE appearances of the Fulmar are exceedingly rare on our coast. I have in my own collection a specimen which was found dead on the beach, near Brighton, on Oct. 7, 1852; and Mr. Dennis told me that he obtained another, which was washed up alive on the shore under Seaford Head, December 21, 1858, and was roughly stuffed by a bricklayer. This had been wounded by shot, one of its legs having been shattered, but it was healed when taken. It was restuffed by Mr. Pratt. The Fulmar keeps for the most part at a considerable distance from the land.

In the 'Zoologist' (p. 598), another specimen is recorded by me, which was found dead on the beach at Brighton, near Black Rock, January 30, 1858. It was quite fresh, and had evidently been recently shot.

In the 'Zoologist' for 1887 (p. 28), Mr. F. V. Theobald records a specimen picked up in an exhausted state near Rye a year before, and shown to him by a bird-stuffer at St. Leonards. Mr. Parkin (p. n.) has the following:—"Fulmar Petrel picked up dead on the beach between Winchelsea and Fairlight. Brought to Mr. Sorell, of Hastings, for preservation. The bird was in a very emaciated condition, and seemed as if it had been starved." All the specimens mentioned were obtained after heavy gales.

In St. Kilda the Fulmar breeds in countless numbers, selecting for the site of its nest places where the cliff, although very precipitous, is covered with grass, sorrel, and other plants, and in some parts of these cliffs the ground is almost white with sitting Fulmars. The bird often makes a hole sufficient to half conceal it. The nests are very slight, and

are often dispensed with altogether. More generally a little dry grass is the only material used. This bird when handled emits a quantity of oil, and the whole bird is impregnated with a scent which has been compared to exaggerated musk, so strong that it still retains it even though it may have been stuffed for years. It is a very voracious feeder, robbing the herring nets, and seizing on masses of blubber even when the men are engaged in flensing a whale.

SOOTY SHEARWATER.

Puffinus griseus.

THE first example obtained in Sussex was, I believe, one brought to Mr. Dennis, respecting which he tells me, in a letter dated July 4th, 1850, that it was picked up dead after a gale, under the cliff at Seaford, a few days previously. Of its habits little appears to be known. It is said to burrow in peaty ground for three or four feet horizontally, and then turning slightly to the right or left, to construct a rude nest of twigs and leaves, in which it deposits a single egg. In New Zealand, where it is said to breed, the Maories esteem the young birds as a delicacy, and hold them over their mouths to swallow the oily matter which they disgorge. The old birds roost on shore, and are very noisy during the night. The food of this Shearwater is of the same nature as that of its congeners. (See Yarrell, B. B. vol. iv. p. 19.)

Mr. Parkin, of Hastings, sent me notice that a male of this species was shot off that town on the 3rd of September, 1890. This example was taken to Mr. Bristow, the well-known naturalist of St. Leonards-on-Sea, by whom it has been beautifully mounted, and it is now in my collection. I

have lately met with a lady who had spent a summer in Madeira, and informed me that a bird, which she thought from my specimens was the Sooty Shearwater, was an occasional visitor to that island, flying about at night uttering most fearful screams, which were considered by the natives as an omen of evil, especially if heard by a sick person. The lady also said that she had been told that the bird used its hooked bill in the manner of a Parrot while climbing about the rocks, and that it bred in the Desertas.

MANX SHEARWATER.

Puffinus anglorum.

THIS species occurs on our coast occasionally, but cannot be called common. In February 1854 I heard from Mr. Dennis that four adult Manx Shearwaters were seen in Seaford Bay. Mr. Knox merely states that it is an unusual and accidental visitor to this part of the English Channel. It breeds in the Scilly Isles, on the Calf of Man, many of the Hebrides, and the Orkneys, and at St. Kilda it is one of the commonest birds. Its food is principally composed of small cuttlefish, mollusks, and scraps of offal found floating in the sea. It also eats great quantities of sorrel, and the remains of seaweed have been found in its interior. It burrows in the ground like the Puffin, the holes being sometimes very long, and often under large masses of rock; the nests are merely little bunches of dried grass. Its note may be expressed as "Kitty-coo-roo," and at night it is very garrulous.

Mr. Parkin, in his p. n., states that a fine specimen was obtained at Bexhill, August 18th, 1882. Mr. Booth writes that the flight of this bird when viewed for the first time is sure to attract attention, as it glides with an undulating

motion over the water, and may be readily recognized at almost any distance. In the 'Zoologist' (p. 6606) we find the following from Mr. John Wilson :—"Manx Shearwater, 1847," in a list of rare birds near Worthing, with no remark. And on p. 9102, for 1864, Mr. Dutton writes of this bird that one was shot off Beachy Head about two years since, which came into his possession. In the 'Zoologist' (p. 391 of the volume for 1890), Mr. T. R. Harden, of Hastings, states "that on going into the garden of a house at Hurst Green, in August 1882, he saw a strange bird coming towards him in apparently a very exhausted state, which alighted in the garden, and was caught by his dog, when he found it to be a Manx Shearwater. A strong south-western gale was blowing at the time, and Hastings, the nearest sea-point, is fourteen miles distant. He has it still, preserved."

FORK-TAILED OR LEACH'S PETREL.

Cymochorea leucorrhoa.

THIS species is much less common than the Storm Petrel, most of the specimens met with having been driven ashore, or even far inland, by heavy storms. I have noted that on November 15th, 1840, two were picked up dead on the beach at Brighton; one of them had lost a foot, but the stump was perfectly healed and covered by two scutes; and on December 2nd in the same year, one was picked up dead and much decomposed, near Lancing, about a mile from the shore, having no doubt been driven in by the same gale. On November 23rd, 1841, a specimen was shot from the beach between Shoreham and Hove, and another from a boat off Brighton. This latter was attracted by liver which had been thrown out

for the Gulls. On November 3rd, 1859, an example in very perfect plumage, but minus a foot, lost apparently long ago, was picked up dead on Patches Farm, Cowfold; this also was after a furious gale, and at least ten miles from the sea.

Mr. Knox mentions its occurrence in many places along the coast, and specially notices one picked up at Lodsworth, almost fifteen miles inland. Mr. Jeffery (p. n.) mentions one found dead at Sidlesham, November 25th, 1865, and two others, on the 28th of the same month, at the same place; also one shot at Bosham on December 5th, 1866, which was found to contain pieces of sea-weed, and parts of the stems and blossoms of sainfoin, and two more obtained in November and December 1881, one at Dell Quay, the other at Birdham. Mr. Dennis informed me that a Fork-tailed Petrel was found alive among the furze at Denton Top, near Lewes, December 15th, 1856.

In the 'Zoologist' (p. 2392) one was recorded by me which was picked up alive, but in an exhausted state, at Rottingdean, on December 14th, 1849, and Mr. Ellman records another example which was found dead on the shore at Brighton, on November 8th, 1850 (p. 2970).

This Petrel breeds on St. Kilda, and on North Rona, where Mr. Swinburne found it abundant, nesting among some old ruins, one large main burrow serving for several pairs of these birds, which made smaller burrows branching off from it at right angles. The note is said to resemble the syllables, "pewrit-pewrit." It feeds, like the other, on any greasy substances it can obtain.

In Messrs. Harvie-Brown and Buckley's 'Fauna of the Outer Hebrides,' we find, at p. 154, that Sir W. E. Milner discovered a colony of these birds on the Dune of St. Kilda in 1848. He considered that they bred three weeks earlier than the Storm Petrel. And since his visit there this species has been found in great abundance on Borreay, one of

the St. Kilda group; also in Mingula and Barray a few pairs in holes and cracks in the peat, and on several other islands of the west of Scotland.

STORM PETREL.

Procellaria pelagica.

THIS Petrel is found in large numbers in the Channel, generally far out at sea. In my own notes I find that one was picked up in the churchyard of Hailsham, having been blown against the spire during the gale of February 26, 1818. Four specimens of this species were shot about half a mile off Brighton, on November 5th, 1815, which were preserved by Mr. Pratt. In the Isle of Burhou, off Alderney, about the year 1836, I found this bird in deserted rabbit-burrows, and took the eggs. I did not see the nests. In each case the bird allowed me to take it out, and voided a quantity of oil and some green substance. I did not see any of the birds on the wing. It is said to breed on the Scilly Isles, and on many of those of Scotland, as far north as the Orkneys and Shetlands.

Mr. Booth says that they are extremely numerous in the spring, and may be occasionally met with in the autumn; adding that in the former season, when they are gathering in the Channel, and on the whole of our coast line, before they make a move to their northern breeding-stations, they are to be found almost every day that an attempt is made to ascertain their whereabouts. Mr. Booth suggests that the name "Mother Carey's Chicken" is a corruption of "Madre cara," addressed by pious seamen to the Virgin, when beseeching her to avert a storm.

Mr. Hewitson, in the 1st edit. of his 'Illustrations of the Eggs of British Birds' (vol. ii. p. 46), says that he found the Storm Petrels breeding in Foula, in holes in the cliff, at a great height above the sea, but in Oxa they were breeding on the earth, under stones on the beach, at a depth of three or four feet or more. When walking, he could hear them chattering under his feet, singing in a sort of warbling note a good deal like that of the Swallow when hovering over a chimney, but somewhat harsher. The nests seem to have been made with little care, of small bits of stalks of plants. The birds remain in their holes during the day, but at night surround the fishermen in great numbers as soon as they throw out portions of fish. Mr. Graham, ('The Birds of Iona and Mull,' pp. 47, 48), remarks that "Both the young and the old ones, when confined in a basket or bag, escape at the smallest aperture, climbing up the sides like mice, in doing which they use their hooked bill to pull themselves up with: it seems to be of more service to them than their claws."

Again, at p. 96 he observes respecting some young birds of this species:—"These little birds seemed to have an irresistible instinct which led them to attempt to surmount every obstacle which fell in their way. When walking on the table every book and desk must be climbed by means of the hooked bill, with the assistance of claws and pinions. When upon the floor, I have noticed them striving for a considerable time to ascend the wall of the room."

WILSON'S PETREL.

Oceanites oceanica.

THE only occurrence of this Petrel on the coast of Sussex is that mentioned by Mr. Bond ('Zoologist,' p. 148) as having

been obtained on the Sussex coast, and lately come into his possession. It belongs to the Atlantic Ocean. Of its breeding habits little is known. Mr. Godman, in his 'Natural History of the Azores,' says (p. 40):—"On returning from Flores to Fayal, we were becalmed for some hours; and as there were a good many Petrels flying about, I took the boat belonging to the schooner and shot some. They were all of this [Wilson's] species, nor did I see any other in the archipelago. In flying they carry their legs stretched straight out behind them, and their feet protruded about an inch beyond the tail, producing the effect of two long tail-feathers. I know nothing about this species breeding in the archipelago, though I suspect it does, as it remains throughout the year."

RAZOR-BILL.

Alca torda.

THE Razor-bill, known also as the Parrot-billed Willock and the Tinkershere, is found around our coast in every season of the year, but very few appear to breed on the Sussex cliffs at the present time, though they are often met with in the Channel. It breeds in vast numbers on Flamborough Head, preferring the highest ledges in the most lofty parts of the cliff; it makes no nest, but places its single egg on the bare rock. In June 1881, I was told by the boatmen there that they frequently laid their eggs in a deep cleft of the chalk, where they are very difficult to get at. On the cliffs and on the sea were many hundreds of these birds, and they were so tame that they suffered themselves to be nearly touched with an oar, when they merely dived, and generally came to the surface on the other side of the boat. It is a

very silent bird, the only note I heard being an occasional dull croak. In diving it uses its wings as if flying, pursuing the fish under water, as well as taking them on the surface. They are eaten by the fishermen, who bake them, after they have been skinned and laid in fresh water.

Mr. Booth states that he has frequently remarked that during winter, "previous to the setting in of stormy weather in the Channel, Razor-bills were exceedingly restless, immense flocks of these and other Divers being seen on wing making their way either east or west for several hours. No general movement to any distance appeared to be taken; within a day or two the stream of birds would probably be seen taking an opposite course. At times, when the fry of fish are plentiful. . . . I have seen these birds perfectly crammed with food, snapping up the glittering morsels by merely dipping their heads below the surface without diving. . . . I am not acquainted with any breeding-stations of this species . . . within many miles of the Sussex coast. . . . That such still exist, however, is evident, as a fisherman who was working his shrimp-net over the sands near Shoreham, on 9th of August 1883, captured in the shallow water a young one that had strayed some distance from the old bird." He further says that the fisherman took the young one home, but his wife killed it, as it constantly cried for food. Mr. Dutton says that the Razor-bill breeds on the cliffs about Eastbourne ('Zoologist,' p. 9101).

GUILLEMOT.

Uria troile.

GENERALLY known as the Willock, formerly bred abundantly on Beachy Head; but owing to incessant persecution, there

are not now more than two or three pairs. Mr. Booth states that on April 23rd, 1874, "thousands of this species were observed in the Channel, some nine or ten miles out at sea, off Brighton. Several large flocks flew east during the day, but the majority were floating motionless on the glassy surface of the water, unruffled by a breath of air. These birds were, with few exceptions, in full summer plumage, only a single specimen in the perfect winter dress being noticed." The Guillemot flies with great speed, but rises with difficulty at all times, flapping along the water for some time before getting well on the wing, and if fully fed, it will not rise, but merely dives, and when mounting to the top of the cliff, makes several circles before it can attain the necessary height. The egg is placed on the bare rock, generally on the middle ledges of the cliffs, without any nest. Long rows of Guillemots may be observed in such places as Flamborough Head sitting close together, most of them with their white breasts toward the sea. Their food and habits are similar to those of the Razor-bill.

On November 28th, 1850, I saw, at Mr. Swaysland's, an immature specimen of the variety known as the Ringed Guillemot, which was formerly considered a distinct species. It had been shot off the Chain Pier at Brighton on Oct. 22nd.

Mr. Dennis informs me that on July 4th, 1850, as he was walking near Seaford, his attention was called by a child to a "duck" which was sitting on some wreck driving about in Seaford Bay. He ran down to the edge of the water, and fired at the bird, which was hard hit and unable to fly, but every time he approached it contrived to elude him. By hiding behind a groyne he got another shot with a cartridge and knocked the bird under water; on rising it was feet uppermost. His spaniel dashed in for it, but it did battle with its bill and fairly drove the dog off. He then fired again, and the dog fetched it out. It proved to be a Ringed

Guillemot, and was preserved by Mr. Swaysland. Mr. Dennis sent another specimen to the same bird-stuffer on Jan. 8th, 1853, which had been picked up dead under the cliff at Seaford.

Mr. Booth remarks that in the Channel he has seen these birds very plentiful on several occasions, and that on April 23rd, 1884, several were observed eight or nine miles off Brighton, in perfect winter dress; the white ring and bridle were still conspicuous, a narrow line of dull white enclosing the bridle. A bird exhibiting this state of plumage was shot off Rottingdean, in December 1878. Mr. Wilson states ('Zoologist,' p. 6606) that a specimen was taken in a field near Worthing, in August 1854. At p. 9122, Mr. Dutton records a very beautiful specimen shot off Eastbourne, April 19th, 1864.

BLACK GUILLEMOT.

Uria grylle.

THIS Guillemot is only an occasional straggler to the Sussex coast. It breeds in the rocky cliffs of the coast of Scotland, more especially on the eastern side, and lives almost entirely on the open sea, nothing but stress of weather ever bringing it inland except in the breeding-season. The general habits of this species are much the same as those of the last described; two points of difference are, however, remarkable, that whereas the Common Guillemot never lays more than one egg, the present bird always lays two, and instead of placing them on the higher ledges of the cliffs, it always chooses a locality in crevices, at a low elevation, under stones near the water, or even on the sea-shore.

I am informed by Mr. Bristow, the well-known naturalist

of St. Leonards-on-Sea, that on October 12th, 1882, a female immature Black Guillemot was shot off that town by Mr. Maggs. In 'The Birds of Iona and Mull,' p. 105, Mr. Graham states that during incubation these birds sit erect on their nests, gasping out a plaintive wheezing noise something like the complainings of a set of very young kittens. This seems to be their only cry, for, except at this time of year, they are entirely mute.

LITTLE AUK.

Mergulus alle.

THE Little Auk is entirely arctic in its breeding-quarters, and only an occasional visitor to our coasts. The only note I have of it is the following. On November 5th, 1841, I noticed a Little Auk sitting on a small rock in a little pool, close to Portobello, near Brighton. It took to the water and swam about for a short time, returning again to its station. Seeing a shrimper a short distance off, I beckoned to him, and when he disturbed it, it flew to a short distance; but after chasing it for nearly a mile, he at last caught it. It was rather curious that it never attempted to get out to sea. It is now in my collection.

On November 23rd, 1850, I saw one at Mr. Swaysland's which had just been caught by some fisherwomen at Brighton, and another which had been taken about the same time. In the first week of February 1864, a Little Auk was caught alive in Lansdowne-place, Brighton, having been seen to fly against a house during a thick fog. It appeared uninjured and was in good condition; the weather was quite calm at the time. I have another, found dead at Hurst-Pierpoint, but have lost the date. Mr. Jeffery (p. n.)

mentions two taken near Chichester, in the winter of 1858–59, and another in December 1866. In the ‘Zoologist’ (p. 2070) Mr. Ellman mentions one obtained near Crawley, in November 1850.

The Little Auk feeds entirely on small crustacea, and in the breeding-season the mouth is often crowded with them for feeding their young, the form of the bill not being adapted for carrying small fish.

PUFFIN.

Fratercula arctica.

THE Puffin, Coulternech, or Sea Parrot, having no breeding-place on our coast, is not very frequently met with, and of those which have occurred the greater part have been washed up dead on the beach, after a heavy storm. A few are, however, occasionally seen far out in the Channel, as might be expected, having probably strayed from the Isle of Wight, where they have a breeding-station. The Puffin often appropriates the burrow of a rabbit, in which it lays its single egg; but more often these birds dig their holes for themselves, and sometimes to a very considerable distance. For this purpose they generally select a crumbling soil on a grassy slope near or upon the top of a cliff. The bite of the Puffin is said not to be so serious as from the form of the bill might be expected; but I cannot agree in this opinion, as I once brought one of these birds out of its hole, fixed on the top of my finger, which it had bitten to the bone, and I had to kill it before it would let go. Though it was sixty years ago, I still bear the marks.

They associate in large numbers at the breeding-places, at which they arrive and whence they depart with most

singular regularity, almost always to a day, according to the custom of the locality. In many places they are exported in immense numbers, packed in barrels, to Roman Catholic countries, for use on *maigre* days. An unusual number of these birds were, as I heard from Mr. Dennis, washed ashore near Scaford, by a great gale in January 1853. One, in full plumage, was brought to him in good order, and several others were found in various stages of decomposition. The Puffin feeds on fish and mollusks, and is an excellent diver. Mr. Jeffery, writing in the 'Zoologist' (p. 168, s. s.), states that one was shot on an arm of Chichester Harbour on February 7th, 1865; an immature specimen. It is rarely met with in our harbours.

GREAT NORTHERN DIVER.

Colymbus glacialis.

THIS splendid Diver, the largest of the genus which visits our coast, is often found in considerable numbers, making its first appearance in April, though adult birds may be met with in the Channel till quite the end of May, and I have seen many there during these months in various stages of plumage. The Great Northern Diver is so powerful a swimmer and so expert in diving that it is exceedingly difficult to get within shot of it, and then, unless it happen to be struck on the head or neck, which from these parts being the first to disappear is not probable, you cannot make sure of it. When it dives, it rarely appears again within at least a quarter of a mile, and often sinks so low in the water as to be very hard to discover.

When caught it is very tenacious of life, and indulges in

most awful screams and vigorously attacks all around it. It feeds entirely on fish, and is frequently taken in the herring nets. I have had two fine adult specimens, male and female, brought to me, which had been caught in this manner off Brighton. Mr. Booth remarks that on April 21st, 1874, he noticed half a dozen fine mature birds, together with three or four in a half-and-half state of plumage, at sea, off Brighton, and a few days later some Worthing fishermen reported a party of thirteen off Goring, half of which were in full plumage. Mr. Jeffery ('Zoologist,' p. 3035-6) says that a specimen of this bird was picked up on the top of a high ridge of the chalk down, in the parish of Beddingham, on December 20th, and that it is in the possession of Mr. P. Ellman, of that place, by whom it was found. He also records (on p. 9449) a second, an adult female, killed on December 6th, 1864, and says that another accompanied it, and was afterwards shot. In the first specimen were found two flat-fish, and in the second a quantity of fish-bones; he adds that in the immature state the species is not unfrequently met with during the winter months. Unless accidentally driven by tempest, or in the breeding-season, this species is never seen inland; it is, in fact, entirely built for swimming, and owing to the legs being placed so far behind, it cannot stand upright on them. Except to incubate its eggs, it never comes on shore, and, in fact, it cannot walk without resting its breast on the ground. The nest is generally on an island in a lake, always on the edge of the water, and much exposed. It is slightly and clumsily made of decayed grass and water-plants, a road being ploughed by the bird from the nest to the water.

BLACK-THROATED DIVER.

Colymbus arcticus.

THIS may be considered the rarest of the three Divers, but is occasionally met with in the Channel, mostly in the immature dress, or while undergoing the change into that of the adult. Its habits do not appear to differ from those of the Great Northern Diver. I have a note that one of this species, in the mature plumage, was shot on the river Adur, close to Beeding chalk-pit, on March 6th, 1840; also that an immature example was shot near Crawley, November 28th, 1850, some fourteen miles from the sea.*

Mr. Knox mentions that he has a remarkably fine adult bird in his collection, which was shot in Chichester Harbour in the winter of 1815; that he had seen one at the Mechanics' Institute at Hastings, which had been killed near that town; and that a third, in the Chichester Museum, was sent from Selsey.

Mr. Jeffery in his p. n. alludes to one at Selsey in January 1859, one at Sidlesham in mixed adult and immature plumage; and says that he saw several at Chichester in November 1865, and one in full summer plumage in April 1866. He records, in 1873, one at Bosham; in January 1875, several in Chichester Harbour; and one at Bosham in 1877. Mr. Ellman records one in winter plumage, obtained at Pevensy, in December 1850.

It breeds in Scotland on the mainland in preference to the little Loch islands, and not so close to the water as the preceding species.

* I have lately seen a specimen in winter plumage which was shot some years ago on the lake at Knepp.

RED-THROATED DIVER.

Colymbus septentrionalis.

THIS is the most abundant of all the Divers, following the shoals of sprats, whence it has obtained the name of Sprat-loon, devouring these fish in great numbers, as well as shrimps. Many hundreds of these birds may daily be seen passing up and down Channel, shifting about in small parties, particularly in stormy weather. This Diver has a very powerful flight, often ascending to a great height in the air, and occasionally uttering its harsh guttural scream, especially before rain or wind. In rough weather it frequently comes for shelter to our harbours, and a few non-breeding birds may be found throughout the year. This species prefers to nest by small lochs and tarns, sometimes at a considerable altitude.

In Caithness and Sutherland it breeds out on the moors, making a very little nest, a few yards from the water. The Divers seem to be wholly constructed for this element, their mode of progression on land being by pushing themselves along on their breast.

PODICIPEDIDÆ.

GREAT CRESTED GREBE.

Podiceps cristatus.

THIS Grebe is most commonly found with us in the winter, but a few seem to be resident, frequenting large ponds where there are plenty of reeds. Its food consists for the most

part of eels, small roach, tadpoles, and frogs. It is a great diver and very seldom seen on land, often swimming with only the head and neck above water. I am not aware that it breeds in this county. The bird is rarely to be seen on the nest, which is composed of a considerable mass of vegetable matter, half decayed and always very wet and muddy, and so very low in the water that the eggs, which it always covers on leaving, are generally considerably stained. It breeds on several of the Norfolk and Suffolk Broads. In severe weather this bird betakes itself to the sea. All the Grebes have a curious habit of swallowing their own feathers, a mass of which is very generally to be found in their interior.

I have a female, taken in the winter plumage, which was shot on a flood in the Level of the Adur, near Henfield, on December 20th, 1839; and another, in similar dress, was obtained at the same place on the 25th. In the winter, should the sea be very rough, they enter the harbours.

Mr. Jeffery (p. n.) mentions a male sent him from Sidlesham, the stomach of which was crammed with its own feathers, the remains of fish, &c.; and others which had been killed near Chichester contained much the same. He mentions also several killed in the neighbourhood. The ordinary note of alarm may be expressed by the syllables *keck, keck*, but in the breeding-season its note is a guttural croak. This Grebe is much prized by the plumassiers.

RED-NECKED GREBE.

Podiceps griseigena.

THIS species is only a winter visitant, and is much rarer than the preceding, and much more marine in its habits. It has never been found nesting in this country, and leaves us

before the breeding-season, though it occasionally remains till it has assumed the plumage of that period before betaking itself to Holland, Norway, and Sweden, its nearest breeding-places.

In my own notes I find that I received a specimen of this Grebe, which had been shot on Warnham Millpond in January 1849, in winter plumage. In November 1847, two specimens were shot off Shoreham, and in the early part of January 1850, a similar example was killed on Knepp Pond, in the parish of Shipley, and is now in the possession of a member of the Burrell family. Mr. Jeffery remarks (in p. n.) that a female was obtained on December 20th, 1850, in Chichester Harbour; a male near Selsey, November 1863, containing nothing but feathers; a third in August 1870, a female in full plumage, and with the ovary well developed, shot at Bosham; and a fourth, sex not noted, containing a mass of feathers and half-digested shrimps, on January 1st, 1870.

Mr. Dennis informs me that one of these Grebes was shot at Newhaven in the winter of 1844-5, and another at Hope Gap, Cuckmere, on January 27th, 1857.

Yarrell (B. B. vol. iv. p. 126) says that the late Mr. Dann, writing respecting the breeding of this species on the Gulf of Bothnia, states that they are by no means shy, and keep up a constant croaking, and that they do not use their wings while under water. The nest is described as placed among aquatic herbage and reeds, being built of similar decayed material, and the call-note as a loud, clear *keck, keck*. The birds feed on small fish, crustacea, and water-insects; and in one, examined by Montagu, the stomach was distended by its own feathers and small seeds. In the 'Zoologist' for 1865, Mr. Jeffery records an example shot in Pagham Harbour, in February of that year (p. 9582).

SCLAVONIAN GREBE.

Podiceps auritus.

THIS bird is found on the sea, all along the coast, in spring and autumn, and, in severe weather, in the estuaries, and the ditches in the marsh-lands. It is particularly fond of shallow water, and chiefly frequents those parts of the coast where there is an abundance of mussels, among which it seeks for small fish, crustacea, &c. It is a tame bird when undisturbed, but when much molested it is difficult to get a shot at. It has not been found breeding in Britain, but during the nesting-season frequents many parts of the north of Europe. The late Mr. Proctor, of the Durham University Museum, found it breeding on fresh water in Iceland, forming a large nest among the reeds. He states also that on shooting one of these birds he saw two young ones which had been concealed beneath its wings. I have a note of an immature specimen which was shot on a pond near Woodman-cote, on February 5th, 1839. In February 1845, I found one in a brook at Lancing, which on my first approach dived and remained submerged for a long time, but on coming up to the surface it took wing, and I obtained it; it was in full winter plumage. In the 'Zoologist' (p. 9540), it is recorded by Mr. J. H. Gurney, that a Sclavonian Grebe was found alive, apparently asleep, in a walled garden by a labourer at Worthing, who caught it and took it to Mr. Wells, naturalist, March 7, 1865; and at p. 9582 (*op. cit.*) Mr. Jeffery mentions one shot in Pagham Harbour in February, and in p. n. mentions one killed at the head of Chichester Harbour, on January 31st, 1866. It is stated in Yarrell (B. B. vol. iv. p. 135), that Mr. Benzon found the nests in Denmark, and that they were not among rushes, but were on tussocks on the edges of the lakes.

EARED GREBE.

Podiceps nigricollis.

THIS is the rarest of the family, making its appearance, at uncertain times, off our coast, and on the pools and rivers, as well as in the ditches in the levels. Nearly all the specimens being met with in the winter, it is therefore rarely found in the breeding-plumage, and never nests in this country, yet the only one I ever shot myself was in that plumage. I obtained it on the Salts Farm, near Lancing, in April 1854.

Mr. Booth records one, in his 'Rough Notes,' which had been caught by a dog in Pevensey Level, and it being put in a tub of water, he had a good opportunity of examining it. He further tells us that while shooting between Shoreham and Worthing, on December 10th, 1879, he came at half-ebb tide on several of these birds among the old groynes and breakwaters, which form an attractive resort for small fish, shrimps, prawns, and other marine animals which here find shelter among half-decayed piles and planks. "During the afternoon," says Mr. Booth, "I plainly identified every species of our British Grebes, obtaining specimens in full winter plumage of the Great Crested, the Red-necked, and Eared, as well as passing and closely examining several Slavonian in the shoal water near the sands," also seeing a pair of Little Grebes; he further adds that one or two other specimens of the Eared Grebe were obtained by local gunners along the Sussex coast during the last few years, all in full winter plumage. Mr. Dennis mentions, in a letter to me, without date, that he had a beautiful specimen, killed with a stone by a boy at Cuckmere.

LITTLE GREBE.

Podiceps fluviatilis.

THE provincial name of the Little Grebe is Dabchick, though it is occasionally called the Mole-Diver, and it is the most abundant of its genus. Resident throughout the year, it is to be found on most of the large pieces of water, preferring those with plenty of reeds, as well as in the ditches of the marsh-lands; and, when the fresh water is frozen, often betaking itself to the brackish pools on the coast, or, not seldom, to the sea. If approached cautiously, it may be frequently seen swimming about, apparently picking up some kind of food from the surface and snapping at insects on the wing; but on the slightest disturbance it dives, and probably disappears among the reeds. It builds a semi-floating nest, which looks like a lump of decayed weeds, generally placed at the edge of the water. If it has eggs, it always covers them on leaving the nest. I learn from one of my brothers, who has excellent opportunities of observing its habits, that he has seen this done by throwing the mud of the nest backwards with its *feet* as it dives off from it. The editor of Yarrell (vol. iv. p. 140) states that Mr. Thurnall, writing to Mr. Bond, observes that he had seen the bird do it with her *beak*. Perhaps in this case she had more time at her disposal than she would have had on any sudden alarm. The young do not always dive on being disturbed, for I saw a friend whip in a little one, which must have been two or three days old, with his fly-line, on Hawkins' Pond, in St. Leonards Forest. I have it now, and a beautiful little creature it is, being in colour like a very young tabby kitten. It uttered a continual piping like a young chicken, but weaker. After receiving it in a landing-net, I carried it in a bag for about two hours, and every now and

then it uttered the same piping note ; but finding it was being pressed by a trout in the same bag, I put it into a small wooden match-box. On arriving at home, I was surprised to find it alive, and on being put into a basin of water it swam about, still uttering its little note. When I first caught it, it could not stand, but carried its legs stretched out behind ; finding it was injured I was obliged to kill it, which I did by pressure on the breast, and, though only about $4\frac{1}{2}$ inches in length, I was sorry to find it very tenacious of life. We afterwards, on the same pond, about ten yards from the shore, found a nest containing six eggs, carefully covered with weeds. All were arranged in the nest with the points upward, and differed slightly in form, two being larger at one end than at the other, the rest being pointed at both, as is most usual. Another circumstance which I thought remarkable was that some appeared to be much further advanced in incubation than others.

I was once present at an amusing scene, a man being brought before the magistrates on a charge of taking a Partridge's egg. The witness, a game-keeper, had in his hand a Chaffinch's nest, containing several small birds' eggs, and a large white one. The chairman told him to hand up the nest to him, and asked which was the Partridge's egg. "The big'un," replied the keeper with contemptuous assurance, on which he was asked whether he could swear to a Partridge's egg when he saw it, and he was very indignant. The chairman, however, taking a pair of scissors from his pocket, deliberately cut open the egg, and producing a young Dabchick, set it upon the desk, observing : "There's your Partridge for you," to the great amusement of the court and the discomfiture of the keeper. The case was, of course, dismissed, the chairman recommending the witness to learn his business before again practising his profession. The Little Grebe swims with considerable swiftness, and

stands much more uprightly than its congeners. Its food consists of small fish, aquatic and other insects, a considerable quantity of vegetable matter, and, like the rest of the family, it swallows a large quantity of its own feathers. Mr. Jeffery tells me that he had seen, at one house at Chichester, the skins of the breasts of fourteen Little Grebes, cut up the middle, and sewn together for trimmings. In the 'Zoologist' (p. 1182, s. s.) Mr. J. W. Stephenson states that he had heard from Worthing, that on the 6th of November, 1868, an unusual number of this species were seen at, and in the neighbourhood of, Lancing. They were said to be "in every ditch," and on the following day not one was to be seen.

STEGANOPODES.

PHALACROCORACIDÆ.

COMMON CORMORANT.

Phalacrocorax carbo.

This entirely marine species, sometimes called the "Isle of Wight Parson," from the white marks on the throat somewhat resembling the bands of an ecclesiastic, is by no means common in the eastern part of the county, and at the present time it breeds only on Seaford Head; the colony there being but small, our own birds are supplemented by an occasional stranger from the Isle of Wight, the next nearest breeding-place. The Cormorant lives entirely on fish, especially on eels. It is a great diver, using its wings under water, as I have had good opportunities of observing at Staffa, and about the sea-caves on the coast of Mayo. It

generally in this country breeds on sea-cliffs ; but Mr. Lubbock, in his ' Fauna of Norfolk ' (p. 173-4), states that formerly Cormorants nested on high trees round Fritton decoy. In a note to p. 174, *op. cit.*, he says that Cormorants use the nests of the Heron.

I visited Horster Meer in Holland, in the summer of 1882, where, in that immense marsh, we saw the remains of many Cormorants' nests of the last year, on the level ground, but, the marsh being drained, the birds have now abandoned the locality. The nests, which were about one hundred and fifty in number, built of sticks and twigs, were greatly decayed, but still retained a distinct odour of guano. The spot was slightly elevated above the marsh, and surrounded by coarse herbage, especially a yellow woolly-leaved plant, I believe *Cineraria palustris*, which was growing vigorously. The Cormorant may occasionally be seen standing on a post or pile, in the shallow water of the creeks. I saw a young white-breasted specimen of this bird, on the sixth of February 1841, which had just been shot, a short distance from Shoreham Harbour, where it was considered a rare bird.

The place now most frequented by the Cormorant in the west of Sussex appears to be the estuary north of Thorney Island, where, some twenty years since, an attempt was made to enclose a large tract of mud land, which was for some reason abandoned, but a part of the embankment still remains, studded with piles, which, Mr. Jeffery informs me, are a favourite resort of the Cormorant, and that from twenty to thirty may sometimes be seen perched on their tops. Mr. Knox (O. R. p. 250) mentions the small colony established at Seaford Cliff, and that, in time of floods, the birds occasionally visit the levels of the rivers. I have heard of a Cormorant having, many years since, been observed on the spire of Chichester Cathedral. Mr. Dennis tells me that in the summer of 1844, he saw a Cormorant on a ledge

of Seaford Cliff, and on another occasion saw a person bring home one egg from thence, but never after heard of them; an old man told him that there were a great many before the war, when the soldiers disturbed them*.

The Cormorant is easily domesticated, and is often trained to catch fish for its master, especially in China and Japan.

All the British *Pelecanidæ* or *Phalacrocoracidæ* have the middle toe pectinated. It can be of no use to them for holding fish, and I have no doubt it is given them to plume their feathers and to rid themselves of parasites.

The Cormorant and the Shag are both known to the Sussex fishermen as the "Scart." Mr. Graham, in 'Birds of Iona and Mull' (p. 177), writing of the former as an article of food, states, "I am extremely partial to scart soup; it is identical with hare soup."

SHAG, OR GREEN CORMORANT.

Phalacrocorax graculus.

THIS bird, known as the "Scart," is very rarely met with on our coast, and I never heard of any other Sussex provincial name for it. Its habits are much the same as those of the Cormorant; perhaps the greatest exception is, that this species prefers very dark caverns, or crevices in the cliffs, for building its nest; however, on those of Dorset they breed in company. The Shag in diving, as I have often observed off the Isle of Wight, jumps completely out of the water. The flight is much like that of the Cormorant, but never so high. It has a very loud cry, generally, when alarmed, resembling "gaw, gaw," hoarsely uttered. It has another note something like "go-a-head," also hoarse.

* I am told, however, that a few pairs are nesting there at the present time, April 1890.

I understand there are not many Shags now in the Isle of Wight, where they were formerly in considerable numbers, on the Culvers at one end, and on the Needles at the other. An immature specimen was shot at Rottingdean, in November 1890, and preserved by Mr. Pratt. Mr. Booth, speaking of nests which he had examined on the west coast of Ross-shire, says in his 'Rough Notes,' that they were composed of heather-stalks and smaller twigs, with stems of ferns and other plants, closely interwoven, with a cup-shaped lining of coarse strands of grass and rushes. It does not, however, breed in Sussex. Mr. Knox (O. R. p. 251) observes that he had seen one or two examples, immature, which were killed at Pagham Harbour during the hard winter of 1838-9.

GANNET, OR SOLAN GOOSE.

Sula bassana.

A CONSIDERABLE number of Gannets visit the Channel in winter, generally some eight or ten miles out at sea, seldom approaching the land, except in very severe storms; the greater part of them are immature. I think that in their natural state they feed entirely upon fish, the herring and the sprat being preferred. They are extremely voracious, and will take as many as seven or eight large herrings at a meal; the elasticity of the throat is so great that, as I was informed by Mr. Booth, one of those which he had in confinement swallowed a Guillemot. Its principal breeding places in Britain are Ailsa Craig, in the Firth of Clyde, Souliskerry, in the Orkneys, the Bass Rock, in the Firth of Forth, and St. Kilda.

When at liberty, they take their food by plunging down upon it from a vast height, not by diving, though they do

dive freely, using the wings under water. The nest is placed on high cliffs, on the ledges, or grassy slopes on the tops of them, and is composed of sea-weed and coarse grass, torn up by the roots in masses, which is continually added to during incubation.

There have been many instances of the Gannet being picked up alive, after heavy storms, sometimes far from the sea, as was the case with one found near Cowfold, and brought to me alive, with its feet so "clobbered," as the Sussex people say, with clay, that it could not fly. Another was picked up, under similar circumstances, at Shipley. In April 1837, an unusual time of year for this bird to be so far south, a Gannet, unable to fly, was found at sea off Hastings.

On the 25th of February 1844, I had a Gannet sent me, which had been caught alive at Kemp Town, Brighton; he could not fly, for which I could find no reason. On taking him out of the hamper, he uttered a loud barking note, and fixed on my hand, then transferring his attention to my arm; I got assistance, and with difficulty succeeded in pinioning him. On turning him into the water on a fenced pond, he immediately returned, and gave me a highly unsatisfactory peek on the leg, and seizing my trousers, shook them as a dog would a rat. The next day, I tried to drive him into the water with a stick, but he immediately showed fight, and flew at my cloak. I had some trouble in getting rid of him, but at length he was induced to go into the water, when he swam to a little island, and sitting down remained quiet, apparently sulky. He refused all food till March 3rd, when he condescended to pick up a roach. Though I could detect no difference in the bird, except that he had discontinued his barking note, he took at once to the water, if ashore, and kept at a distance. On the 4th I threw him two dead sea-bream, to which he swam up, but before he came to the floating fish, thrust the whole head and neck under water

about two feet from them, and took them from underneath, swallowing them whole, head first. After this he became very tame and would follow me round the pond, taking greedily pieces of bullock's liver, which he swallowed as readily as fish. He frequently sat on the bank in the daytime with his head under his scapulars *. Should a leaf or twig fall from a tree he immediately swam out to see what it was, and in swimming used his legs alternately. When frightened, he would erect his tail considerably above the water, as he did also when food was thrown to him. After swallowing anything, he invariably washed his bill, often immersing the whole head and neck. Not long after this, I was very sorry to find him dead on the bank. He would attack strangers, and I have no doubt had so molested a man whom I had set to work near the pond that he had kicked him off, which of course he would not own. I found, however, on taking off the skin, that the Gannet had a large quantity of extravasated blood on the muscles of the breast, and that the bird was a male.

HERODIONES.

ARDEIDÆ.

COMMON HERON.

Ardea cinerea.

SUSSEX is well supplied with this bird, there being in it three large heronries, and a few smaller ones. Its food, when in a natural state, consists of fish (especially eels), frogs, snakes,

* A bird never puts its head under its wing, though it is popularly supposed to do so; it merely buries it under the feathers of the shoulder.

and any small mammals it can get, a water-rat being a special *bonne bouche*; but in confinement it is not so particular, feeding greedily even on vegetable matter. In a hard winter it betakes itself to the sea-coast, the mouths of the rivers, and the salt-marshes. If wounded, it must be approached with caution, for it will aim its spear-like bill straight at the face of anyone stooping to pick it up. I well remember, many years ago, a man who had his nose nearly split in two by a Heron, and it will attack a dog with equal ferocity. If a heronry be near a rookery, there is generally constant warfare between the Heron and the Rook, the latter carrying off, if it can, the sticks from the nest of the former, with which to build its own. Notwithstanding these thievish propensities of the Rook, the two birds occasionally breed even on the same tree. In this county, the Heron always breeds in trees, but in some districts it places its nest on the ledges of high cliffs, and even on the ground. When the Heron leaves its abode in search of food, which is at dusk, it frequently flies so high that, were it not for its harsh voice, it would often pass unnoticed. It returns to the heronry about two o'clock A.M. In 'Sussex Archæological Collections' (vol. xxvii. p. 113) it is noted that a keeper at Parham, being asked whether it was true that the Heron, at pairing time, made strange noises, replied, "Yes, frightful! Unless you heard them you would never believe it. Some years ago a rabbit (*sic*), going one night to set his traps, was terribly scared. He thought he heard a woman murdering a child; the cries and shrieks were fearful. He was so frightened that he ran off and cried 'Murder!' People came to see. He forgot his traps and lost them." There is no proof, however, that the terrible sounds proceeded from the Herons. These birds breed in company.

Mr. Knox, who gives a most interesting account of his visit to the Heronry at Parham (O. R. p. 24), thus describes a

nest :—"The lower and external parts were composed of sticks from the larch and fir, the material becoming finer towards the interior, which was lined throughout with very thin birch twigs, closely matted together. It was much wider than that of the Rook, and shallower in proportion." I visited this heronry in May 1876, and then there were just one hundred nests, almost all on fir trees—a few on high birches. A year or two after this, a tremendous gale blew away many of these nests soon after the young were hatched, and numbers were destroyed. The heronry is still prospering, and strictly preserved. Mr. Harting, writing in 1872, gives in his 'British Heronries' (p. 3) the following account of the origin of that at Parham :—"The ancestors of these Herons are said to have been brought from Coity Castle, in Wales, by the falconer of Robert Dudley, Earl of Leicester, in Queen Elizabeth's time, to Penshurst, whence they migrated, about sixty or seventy years ago, to Mitchelgrove, near Worthing, and on the trees there being cut, they went to Parham, in 1832. A portion of the park of Mitchelgrove is in the parish of Angmering; and in Horsfield's 'History of Sussex' (vol. ii. pp. 140-1) may be found the following :—"It is very interesting to observe their early motions during the time of their incubation. As soon as the morning dawns, they are seen to congregate, and soon divide themselves into three distinct bodies. One flight takes an eastern direction, and spreads itself along the course of the river Adur; another takes the upper part of the Arun, and pursues its course toward the Wildbrook at Amberley; the third and largest flock take a western direction; and while some drop along the lower line of the Arun, others proceed to the Manhood, or perhaps to Hayling Island. Although they start together, they do not return in the same order, but singly, and at different periods, according as they have been successful in the pursuit of food.'"

In the 'Sussex Archæological Collections' (vol. xxvii.), where a plate of the heronry at Windmill Hill Place, near Hailsham, is given, it is mentioned (p. 115) that the Rooks and Herons occasionally nest in the same tree; and Mr. H. M. Curteis, in whose park it is situated, thus writes:—"There has been a Heronry at this house for some considerable time—probably dating with the century (but this I am not certain about), but it seems that they and the Rooks have continued, or migrated, together.

"The Herons were first in the Heron Wood, now cut down, in Hurstmonceux Park. I do not know whether the Rooks were at first there or not. The Herons and Rooks went, after the Heron Wood was cut down, to the Toll, near the Castle; from thence, on the trees there dying and decaying, they migrated to the sheep-walk, north of my house, a few hundred yards from their old habitation (leaving still a few nests near the turnpike road, from which they can still be seen sitting on the trees). The curiosity concerning them was their building so close to the house, and in the trees almost overhanging. The nests are not visible in the drawing, as the Herons never build on the front trees."

Concerning the heronry at Brede, in the same paper in the 'Sussex Archæological Collections,' by the Rev. F. H. Arnold, he says:—"A correspondent in 'Science Gossip' informs me that 'it is one of the largest in England, situated north of Fairlight, in a lonely wood, near Broad Oak, at Udimore, near Rye, on the property of E. Frewen, Esq.' The owner has kindly supplied me the following information: "The heronry at Brede is situated in the north-east corner of Great Sowden's wood. About twenty years ago some four hundred nests could be counted in it; but at present there are barely two hundred nests. I cannot in any way account for the decrease in their numbers, as the greatest care is taken to preserve them, and no timber or underwood in

proximity to the heronry has been cut for many years, so as to avoid disturbing them. The trees in which they build are, for the most part, large oak trees, underneath which nothing grows but brambles. The wood is about eighty acres in extent, and lies on the side of a hill facing the north. The Rye and Finchall turnpike road runs along the top of the wood, and by driving along the road the birds can be plainly seen on their nests.”—December, 1886.

In reply to Mr. Jeffery, who wrote to the Honble. C. P. F. Berkeley, in June 1890, he informed him that a few Herons roost in the winter in Blackhouse copse, on the Old Park estate, near Bosham, and that about a dozen years ago there was a nest there with young birds, but so many people came to look at them that they deserted the place. After that, a heronry was established at Molecomb, near Goodwood, where there is now a considerable colony. I am informed that at Emsworth, Hants, where a small stream divides it from Sussex, a Heron was shot from which was taken a trout of two pounds weight. As lately as 1853, there were a few nests in Folkington Wood, near the spot now occupied by the Polegate Station of the L. B. & S. C. railway. I remember also, when a boy, receiving a Heron's egg which was taken from a nest in Hough Wood, near Henfield, which, I believe, was the only one built there. This was in the highest tree in the wood.

The Heron was formerly esteemed a delicacy for the table. In ‘The Northumberland Household Book’ we have: “Item. It is thoughte in like wise that Heronsewes be boughte for my Lordes owne Meas, so they be at XII^d the pece.” It may not be generally known that the Heron, when it gets into deep water, swims well, as I have myself seen in the case of one which fell into a pond when wounded. Castings of the Heron, of a substance resembling white semi-pellucid jelly, may often be found about its haunts.

PURPLE HERON.

Ardea purpurea.

I CAN only find two instances of the occurrence of this bird in Sussex. Mr. Knox (O. R. p. 226) writes :—"An example of this rare Heron was shot on the 28th of September, 1848, at Worthing, by a gentleman of the name of Paul. It was preserved by Mr. Andrews, of that town, and is now in the museum of the Cambridge Philosophical Society." Of the occurrence of the Purple Heron at Catsfield, Mr. Ellman, in the 'Zoologist,' p. 3330, writing in November 1851, makes this statement :—"An immature specimen of this bird was shot at this place last month, and is now in the possession of a gentleman at Hastings." He bought it at the sale of Mr. Ellman's birds. Mr. Potter, formerly a bird-stuffer at Lewes, writing to me in February 1890, says that this example was brought to him in the flesh, by a person who stated that a neighbour of his had shot it, and that he asked him to take it to him, and ascertain what he would charge for stuffing it. He did not like the price, and Mr. Potter continues, "As the pendants of the crest were not perfect, I doubted whether it was a mature bird, and offered 5s. for it, saying I would send him another 5s. if I found it was mature, which I did, to his address at Buxted, near which place he said it was shot. I have forgotten the name and address."

Its nearest breeding places are the marshes of France and Holland. In Yarrell (B. B. vol. iv. p. 175) we find Mr. Alfred Crowley, who visited the Naarden Meer, near Amsterdam, describes the nests as placed about three feet above the water, and made by fixing down twelve or thirteen reeds to form a platform, on which some smaller pieces were laid crosswise. In Ceylon, however, it is found breeding on

trees, and forming flat, but rather bulky nests. At the same page, the following description is given of the habits of the bird :—" In its habits the Purple Heron is more like the Bittern than the Heron last described, and it is shy, and to a considerable extent crepuscular, and even nocturnal, in its time of feeding. From the thinness of the long, snake-like neck, the birds, even when numerous, are with difficulty distinguished, when they are standing in a reed-margined lake, nearly up to their belly in water, their bodies in the shimmering sunlight exactly resembling tussocks of reed. The flight is similar to that of the Common Heron, but the note is more guttural. The food of this species consists of small mammalia, reptiles, fish, and aquatic insects." Mr. Parkin (p. n.) gives the following account :—" Mr. Monk, of St. Anne's, Lewes, has in his collection a Purple Heron, which was shot by old Jack Fuller, of Brightling Park (a well-known old sportsman), near Lewes, in 1822. A glass case large enough for it could not then be procured for it in England. The glass-blowers of Paris then doing larger work, one was sent for from thence. The bird went into Mr. Auckland's collection, at the dispersion of which it was purchased by Mr. Monk. It was badly stuffed, the neck having been cut in three pieces. It was re-stuffed by Mr. Swaysland, of Brighton."

SQUACCO HERON.

Ardea ralloides.

THIS little Heron occurs irregularly on migration, but does not breed in the British Isles. It is an inhabitant of Southern Europe and Africa. The Rev. H. B. Tristram, writing on the "Ornithology of Algeria," in 'The Ibis,' 1860, p. 163, states

that, at Halloula, he found a large colony of Squacco Herons, who were just beginning to sit. Thirty or forty nests were scattered about in various directions in a dense bed of reeds piled up to the height of two or three feet from the mud, supported on tufts of reeds, and composed of great heaps of water-weeds and rushes; each nest contained three or four eggs. Naumann says that he has found very small fish, frogs, small shells, and water-insects in the stomach. He also remarks the partiality of this bird for the company of pigs; it is probable that it is in the habit of feeding after these animals as they turn up the ground with their noses, in the same way that Rooks follow the plough.

Sometime in the summer of 1828, an example of this species was shot by one Thomas Marchant, whom I had often heard speak of it, at Wick Pond, in the parish of Albourne, but it was not till January 1849 that I saw the specimen myself, in the possession of the late Mr. Holman, of Hurstpierpoint, whose brother was tenant of Wick Farm when the bird was shot. At his death it was sold to a tradesman in Brighton, and is now in the possession of a gentleman there, who has kindly allowed me to see it, and I have had it photographed. This specimen is in perfectly mature plumage.

A second Sussex specimen is mentioned by Mr. Knox (O. R. p. 227) under the name of *Little Egret*; he states that it was then in the possession of Sir Percy Shelley. I, knowing that Lady Shelley was living near Bournemouth, requested my friend the Rev. F. Hopkins, residing in that neighbourhood, to find out whether Lady Shelley still had it, and he kindly ascertained that Sir Percy had given it to the Honble. Grantley Berkeley, and that it had passed from him to Mr. Hart, the well-known naturalist, of Christchurch, Hants, who still has it in his museum. Mr. Hart informs me that on receiving the bird he wrote to the late Sir Percy Shelley, and sends me this extract from his reply:—"I gave



50

J. G. Keulemans del. et lith.

Mitern Bros. Lith.

THE SQUACCO HERON.

Ardea ralloides.

Mr. Berkeley a stuffed bird ; it was a Squacco Heron, and was shot by my keeper by the Warnham Pond, about two miles from Horsham, on the hottest day of the very hot summer of 1849. In its stomach were fourteen small roach, without their heads, however." A pretty good meal for so small a bird ! Why they were minus their heads I cannot tell, as Herons in general swallow their prey whole.

NIGHT HERON.

Nycticorax griseus.

LIKE the last, this is a decidedly rare bird with us. I have the following in my own notes:—November 1839, a specimen of the Night Heron was shot at Alfriston. I examined it myself and found it immature. The bird is noticed by Mr. Knox, on my authority (O. R. p. 238), who further says, that "since that period another example has occurred near Cuckmere Haven. A male Night Heron was killed near Appledram Sluice, by Sergeant Carter, on September 6th, 1851, and is now in the collection of the Bishop of Oxford, at Lavington." This Heron feeds by night on worms, fish, frogs, freshwater insects, and mollusks, and conceals itself in trees during the day ; it breeds in colonies. Mr. Dresser ('Birds of Europe,' vol. vi. pp. 266, 267) writes that the flight of the Night Heron is silent and soft, like that of an Owl, the bird drawing in its neck, so that it looks quite short, and carrying its legs stretched out straight behind ; that its call-note is seldom uttered in the day-time, but at night it is rather noisy than otherwise ; and that it climbs about the small branches of trees, and among the close reeds and rushes, with facility ; also that its nest is occasionally placed on low bushes, though generally in a tree, rather flat in shape, built of twigs and thin branches.

LITTLE BITTERN.

Ardetta minuta.

THE Little Bittern, though it has occurred at various times, must be considered a rare bird. It is of skulking habits, and is with difficulty aroused from the thick beds of reeds and sedge in which it conceals itself during the day. It feeds on fish, frogs, and small freshwater mollusks. By some, the note of the male is described as resembling the sound uttered by a paviour when he delivers a blow with his rammer: by others, to the syllable "*pumm*" several times repeated. The female has a cry very like "*get, get.*" The nest is described in Yarrell (B. B. vol. iv. p. 204) as a solid structure of flags, leaves, and bits of grass, attached to upright growing reeds, very little above the water; and sometimes, according to Gloger, a deserted Magpie's nest, in some low bush near a swamp, is utilized. Mr. Knox (O. R. p. 227) states that an adult male was presented to him by Mr. Austen, the Rector of Pulborough, which had been shot as it rose from a weedy pond in his garden, in May 1812; he mentions another male shot at Oving, in the summer of 1852, which passed into the possession of Dr. Tyacke, of Chichester; and that a third specimen was killed in a water meadow, on the western border of Sussex. Mr. Jeffery (p. n.) says that he shot an immature male or a young female at Southbrook, between Ratham and Ashling, in August 1862, and mentions another, adult, killed at Runceton in April 1869, and a third, female or immature, at Nutbourne on October 1st, 1873.

Mr. Thomas Parkin, of Halton, near Hastings (p. n.), states that on October 31st, 1889, a Little Bittern was taken on the Parade at Eastbourne.

In the 'Zoologist' (p. 2147) is the following :—"Occurrence of the Little Bittern at Ewhurst and Sedlescombe : I have seen a male and female of *Ardea minuta*, which were shot at the above places. The female about three months ago ; the male at the latter place, I believe about fifteen months since.—J. B. Ellman, April 20th, 1848."

COMMON BITTERN.

Botaurus stellaris.

ALMOST every severe winter brings us a few of this species. It inhabits bogs which are thickly covered with reeds, among which it sits concealed during the day, wandering abroad at night. It used formerly to breed in a large tract of boggy marsh at Amberley, known as the Wildbrook, now drained. It feeds on much the same substances as the Common Heron, and, like it, has a *penchant* for water-rats, which I have more than once found in its interior, as I have also the common *Ditiscus marginatus*, and eels. Among fish, it seems to prefer the fry of pike. In my own notes, I find that a Bittern was brought to me alive on January 11th, 1841, which had been caught near Cowfold. It was quite passive and did not attempt to defend itself; nothing could induce it to stand up or use its legs in any way, and in about half an hour after I received it, it expired. I could find no sort of injury, and on dissection it proved to be a female. In the stomach were several grains of *wheat*, probably swallowed with some small bird, which had been digested, and a very hard pellet, chiefly consisting of the fur of the water-shrew. No bones being broken, it furnished me with an excellent skeleton.

On January 11th, 1842, a Bittern was shot near Henfield, and on January 6th, 1849, I received another, shot at Lancing, which was a male, and I found in it two short-tailed field-voles, and nothing else. In November, 1850, a farm labourer brought me a female Bittern alive, which was standing beside the wharf at West Grinstead. It seemed very weak, and could not or would not fly, but was very fierce on being approached, ruffling out its feathers, especially those of the head and neck, in the form of a shield, and darting up directly in the face of the man who captured it. When quiet, it stood with the whole of the tarsus on the ground, the neck shrunk between the shoulders, the bill pointing straight upward, looking exactly like a tuft of dead sedge. I put it on a little island in a pond surrounded by a wire fence, and retired a short distance, when after remaining a few minutes stationary, where I had set it down, as if in contemplation, with the head lowered nearly to the ground and the neck stretched out, it deliberately walked to the water, which was about three feet deep, and swam slowly to the bank, where it remained quiet, in the position first mentioned. I then caught it, and cut its wing. In swimming, the head was stretched out a little, the lower mandible being just above the surface of the water. It swam very high, and the under feathers were very little wetted. I put it into the pond again, and it swam with great ease and deliberation some eight or ten yards, as if quite accustomed to the water. The next morning it had escaped, and I never saw it again.

The usual flight of the Bittern is slow and heavy, perfectly noiseless, and in the daytime seldom sustained to any great distance. I had once, though not in Sussex, a good opportunity of observing this, as I one morning flushed no less than eight, in a very boggy and sedgy fen. They were all perfectly mute, though it has been said that, when flushed,

it utters a harsh cry. In the breeding-season, its note has a loud booming or bellowing sound, whence its name of *botaurus*. The nest is on the ground, and is built of reeds and flags, in the most impenetrable part of a fen. Of its merits for the table opinions vary; I have sometimes tasted it, and consider its flavour very like that of a hare.

Mr. Jeffery (p. n.) mentions a Bittern killed at Fishbourne, in January 1860, containing a flat fish and a hard pellet of the fur of the water-rat and shrew, felted together. Another was shot at Binstead, in January 1869; one at Vinnetrow, in February 1880; and another at Ashling, in January of the following year; also a fifth at Vinnetrow, in January 1887. Mr. Knox says he has seen it flushed from the reed-beds at the upper pond in Burton Park.

In the 'Zoologist' (p. 1178, s. s.) we find that a fine adult male Bittern was shot at Steyning, in February 1868.

AMERICAN BITTERN.

Botaurus lentiginosus.

THIS exceedingly rare visitor has, I believe, only occurred twice in Sussex. It is a shy and solitary bird. When flushed among the reeds, it rises with a spring, and at that time utters a loud croaking, in a manner expressive of disgust at being disturbed, and flies off as fast as it can with dangling legs and outstretched neck; but when settled on its course it proceeds more smoothly, with head drawn in and legs stretched out behind. If winged, it defends itself stoutly. Its food consists of various small animals, mollusks, crayfish, frogs, lizards, small snakes, and fish. Its call is described by Audubon as a hoarse croaking, as if the throat were filled with water. In the breeding-season the

male has another peculiar note, which almost exactly resembles the stroke of a mallet on a stake when driven into the ground. It utters also a peculiar call-note, a rough guttural explosive syllable, resembling "hawk" or "quauk"; ordinarily, however, it is a silent bird. The nest is placed on a tuft of grass, or under a bush in a swampy locality (*vide* Mr. Dresser's 'Birds of Europe,' vol. vi. pp. 291-293).

A specimen is recorded by Mr. Dutton, in the 'Zoologist' (p. 1098, s. s.), as having been shot by Mr. Vidler in Pevensey Marsh, on November 26th, 1867, which passed into the collection of Sir John Crewe. The second Sussex specimen was obtained on November 30th, 1879, from a patch of reeds in Amberley Wildbrook, by a person of the name of Knight, who sent it to Mr. Ellis, a naturalist of Arundel, by whom it was sold to Mr. Pratt, of Brighton, and it is now in my collection. This Bittern is said to be a good bird for the table.

CICONIIDÆ.

WHITE STORK.

Ciconia alba.

THIS Stork has rarely appeared in the county; in fact, it was never more than an occasional straggler to any part of the British Isles. It devours fish, frogs, young water-fowl, rats, mice, moles, also earthworms and large spiders, and appears to confine itself to animal food. The nest is very large, often on buildings in the middle of a town, consisting of perhaps a cartload of sticks, lined with straw, grass, &c.; a new nest being rather flat, but fresh materials are occasionally added to it, till it becomes of a great height. Such

a one I saw in a high tree near Amsterdam. While feeding in the meadows, it walks with a grave aspect and stately gait. Its flight is powerful, with the legs carried nearly straight out behind it, and the feet close together; both the legs and the head are rather lowered, as if the feet at one end and the head at the other were too heavy to be carried quite horizontally, thus forming a segment of a circle.

When the Stork alights on the ground, it stretches its legs widely apart, which gives it a strange and ungainly appearance. While feeding, it utters an inward gurgling note as if expressing satisfaction. I am not aware that it has any other vocal sound, but it makes a great clattering with its bill, throwing it on the back of the neck, almost between the shoulders, at other times pressing it to the breast while making this sound.

In my own notes I have the following:—A bird, positively asserted to be a Stork, was observed on the 15th of September, 1841, standing on a building at Blackrock, Brighton, which, on being approached to within about thirty yards, flew out to sea and was lost sight of. In October 1859 another was shot at Selsey. As I knew that two Storks had been killed near Brighton, I wrote to Messrs. Brazenor, of the Lewes Road, who preserved them, and received the following reply from his son:—"The two Storks you ask about were bought by my father, and are now in the Brighton Museum. They were killed on the Race Hill by the late Mr. Richardson at one shot, on September 6th, 1873. They were in a very exhausted state, and allowed a very near approach. There is no doubt they were genuine wild birds, for although a notice of their being killed was published in many papers, we never heard of any having escaped from confinement."

Mr. Ellman, writing to me in March 1852, mentions a White Stork which was shot about three years before in

Romney Marsh, in October 1849, on the Sussex side of the Kent ditch, and passed into the possession of Mr. Lordine of Ewhurst, Sussex.

Mr. Booth, in his 'Rough Notes,' says that early in the spring of 1875 he received notice from a "Looker" (a Sussex term, signifying a person employed in the marshes to look after the cattle) that a strange white bird had been seen about the "Pells" in Pevensy Level; that he sent a servant acquainted with the Stork to find out what it was; and that, in crossing the marshes, he saw and clearly identified it, as it was flying towards the Channel, and it was not seen or heard of again.

In the 'Zoologist' for 1884 (p. 489) is the following:—
 "White Stork at Pevensy. Mr. Vidler, of Pevensy, near Hastings, has kindly sent me a specimen of the White Stork, killed during the latter part of August last. Mr. Vidler writes that there were two Storks, and that they remained about the shore for several days, but seemed very shy. At last one was shot by a coastguard. The other flew away inland, but was seen no more.—T. H. Nelson (Redcar)."

IBIDIDÆ.

GLOSSY IBIS.

Plegadis falcinellus.

THIS extremely rare straggler has occurred in a few instances, and does not breed in Britain, though in South-eastern Europe it is by no means uncommon, nesting in the marshes. In Mr. Dresser's 'Birds of Europe' (vol. vi. p. 340) it is observed that on large morasses in places difficult of access, the nest, which is carelessly constructed

of dried flags and leaves of aquatic plants is placed on the bent-down large water-plants on partially dry places in the marshes. The food of this species consists of small reptiles, the fry of fishes, small crustacea, aquatic insects, worms &c., which it finds on the banks of rivers, the shores of lakes, and muddy flats which are occasionally flooded; it feeds also on beetles and scorpions, and is especially fond of locusts. In its flight, the pinions are beaten rapidly, producing a whizzing sound, after which the bird skims for some distance (see Yarrell's *B. B.* vol. iv. p. 235).

In my own notes I find the following:—On May 25th, 1850, a male Ibis, in full mature plumage, was shot at Piddinghoe, near Newhaven, by a labourer, and was sold to a Mr. Baker, who sent it to the late Mr. Unwin, naturalist, of Lewes. Mr. Potter, writing to me, states that Mr. Unwin sent it to him to set up, and that he purchased it for Mr. Ellman, from whom I bought it, and it is now in my collection.

Mr. Knox (*O. R.* p. 228) has, "A specimen of this rare straggler is in the possession of Mr. Duke, of Lavant, near Chichester, which was shot by Mr. Duke, Jun., of Earnley, on the marshes in that neighbourhood in November 1853."

Mr. Jeffery records (*'Zoologist'* p. 109, s. s.):—"On the 1st of November, 1876, Mr. Willett, of Brighton, informed me that a Glossy Ibis had been shot near Arundel, about a month previously, and that it had come into his possession." Mr. Ellis, naturalist, of Arundel, who preserved the bird, told me it was shot in a water-meadow, between Arundel and Ford.

PLATALEIDÆ.

WHITE SPOONBILL.

Platalea leucorodia.

THE appearance of the Spoonbill in Sussex is merely as a somewhat rare straggler, but that it formerly bred in the county is shown by Mr. J. E. Harting, who quotes the following somewhat quaint extract from a MS. Survey of certain Manors in Sussex :—

“ ‘ M^d that within half a furlonge of Halnaker parke pale, on the west side thereof, lyeth a parke called Goodwoode Parke ; and by the northeft parte thereof lyeth one other parke called Shelhurste Parke, distaunt from Halnaker pale one quarter of a myle. And on the north side of that pale lyeth one other parke called Estden, halfe a myle dystante. In the woods called the Weestwood and the Haselette *Shovelers* and *Hérons* have lately breed, and some *Shovelers* breed there this yeere ’ * * *
 “ That the species referred to in this Survey is the Spoonbill (*Platalea leucorodia*) and not the Shoveller Duck (*Anas clypeata*) seems clear for several reasons. In the first place, ‘ Shoveller,’ ‘ Shoveler,’ ‘ Shovelard,’ and ‘ Sholarde ’ are so many forms of spelling the old name for that species, as clearly identified by Sir Thomas Browne. In the second place, the birds in question were nesting ‘ in a wood,’ where the Shoveller Duck would not be found at any season. And, further, they were breeding in company with Herons, a habit not uncommon with the Spoonbill, as formerly observed in Norfolk, and elsewhere ” (‘ Zoologist,’ pp. 426–428, s. s.).

The nearest breeding place to the British Isles is now Horster Meer, between Amsterdam and Utrecht, which my

daughter and I visited in June 1883, when we found about two hundred birds, but owing to the "meer" having been drained, the part of it on which these birds nested was left an island, and the last boat having been removed a few days before our visit, the place was inaccessible. The birds indeed flew around us, and I was much surprised that, though they were very close to us, we did not hear them utter a sound of any kind. As to seeing the nests, it was out of the question, but, on our way home, we had a basin full of eggs brought to us which had been taken on the island a few days before. Mr. A. Crowley, writing of a visit to this "meer" in May 1884, thus describes the nests:—They were placed on the mud among the reeds, just about a foot or eighteen inches high, and two feet in diameter at the bottom, tapering to about one foot at the top, where there was a slight depression, in which lay four eggs, or four young birds. In the young there was a great difference in age and size, one being a day or so old, and the most advanced nearly ready to leave the nest (*vide* Yarrell's B. B. vol. iv. p. 240). The Spoonbill feeds on fishes and crustaceans, &c. I had an excellent opportunity, at the Zoological Gardens at Amsterdam, of observing the action of this bird while feeding, moving its whole body, with the head, from side to side, with the bill to half its length immersed in water; it appeared to pass the water through it and to sift out any solid portions it might meet with. There were several together, and they seemed very amicable.

I will now mention its appearances in Sussex, and first, from my own notes. A Spoonbill was shot at Cuckmere Haven on October 15th, 1847. Mr. Ellman informed me that three Spoonbills out of a flock of six were shot near Hailsham, on the 3rd of October, 1850. On September 5th, 1856, one, an immature bird, the bill being only $4\frac{1}{2}$ inches long from the forehead, was

shot on the Adur, near Old Shoreham Bridge. Mr. Knox (O. R. p. 228) states that it had been shot at Rye and at Pagham Harbour, that the Chichester Museum contains one shot in that neighbourhood, and that a specimen is in his own collection, which was shot near Seaford, in the autumn of 1844; and Mr. Jeffery saw one at Chichester, which had been shot in 1887, an immature bird.

ANSERES.

ANATIDÆ.

GREY-LAG GOOSE.

Anser cinereus.

This is the only one of its genus which is resident in the British Isles, and is supposed to be the origin of the common domestic Goose. It formerly bred in the Cambridge, Lincolnshire, and Norfolk fens, and up to about a hundred years ago a few continued to do so, particularly about Waterbeach and Wicken. Its building places are now confined to a few spots on the mainland, and on some islands in the lakes of Scotland. The nest is a clumsy structure of dry herbage, reeds, and, externally, a few sticks, placed on the ground. It feeds chiefly at night, on tender grass and young growing corn, as well as on grain, frequenting the inland morasses, and occasionally the sea. This Goose is a rare visitor to Sussex, though in severe winters a considerable flock has occasionally been met with in the Channel, a mile or so off the coast. The only individual which ever came into my hands in the flesh was an immature specimen sent me by a lady for identifi-

cation, which had been shot in the "Brooks" (as they call the level of the Adur near Henfield), on the 29th of November, 1890. It was found alone, and had been observed some days. Of this Goose Mr. Knox says (O. R. p. 242):—"One of our rarest *Anatidæ*. Has been occasionally shot during very severe winters. I obtained two at Pagham, in 1839."

Mr. Booth, in 'Rough Notes,' makes the following observation:—"Large flocks pass along at sea a short distance off the Sussex coast, though few, unless in exceedingly severe weather, penetrate into the marshes. During the winters from 1858 to 1869 I frequently shot over Pevensy Level, but not more than three or four individuals of this species were obtained. Young birds occasionally reach the south of England as early as October; in 1882 one was shot in Shoreham Harbour during the second week in the month." The call-note of the Grey-lag Goose is similar to that of the domestic bird.

In the 'Zoologist' (p. 2773), Mr. Ellman mentions that in February 1850, which was of unusual severity, flocks of wild fowl were very large, and that several Grey-lag Geese were killed in the Sussex marshes.

WHITE-FRONTED GOOSE.

Anser albifrons.

GENERALLY known as the Laughing Goose, from its note; it is by no means uncommon on the coast, large flocks passing in the Channel, about two miles from the land, during severe weather, in the day-time; and this and the Brent are the most abundant of the genus. They come inland at night, and feed on clover, grass, or any green crop they can find, especially

turnips and rape. It makes a large nest near fresh water, at a distance from the coast, and is in considerable esteem for the table. One was shot in the parish of Twineham, December 30th, 1853. In February 1854 large flights of this Goose passed along the coast. Mr. Jeffery (p. n.) mentions two shot at Sidlesham in the severe weather of January 1881. The White-fronted Goose is mentioned by Mr. Ellman among the number shot on the coast in February 1850.

Mr. Booth says that it visits the marshes and sandy flats along the shore, as well as the mud-flats and the salt water mud-banks. Formerly, several hundred might be seen together on the marshes of Pevensey Level, but of late years they have not been so numerous there. In the 'Zoologist' (p. 9100), Mr. Dutton has recorded one shot at Pevensey by Mr. Vidler. Mr. Proctor says it breeds in Iceland, whence he has received the eggs.

BEAN GOOSE.

Anser segetum.

This species arrives on the coast in large flocks, in almost every hard winter, and is much more abundant than the Grey-lag. It has never been proved to breed in Britain. It feeds chiefly by night, and, like the last, comes inland to the stubbles and grassy flats ; it is in some districts exceedingly destructive to the young corn.

When feeding, it is very difficult to approach, and besides being very vigilant individually, there is always a sentinel. At times a flock will pass the night in some open field which they have frequented in the day-time, but usually they will retire to the mud-banks of the estuaries, where they rest more secure from disturbance. Among the immense flocks

which pass over in stormy weather, the Bean Goose is probably strongly represented, but it is only a well-accustomed eye that can distinguish of which species the flocks consist. When flying, they generally range themselves in lines, and the noise they make somewhat resembles that of a pack of foxhounds in full cry, and may be heard at a long distance. They breed in Lapland as soon as the ice is broken up.

Mr. Knox only says this bird is not unusual in hard weather. Mr. Wolley, writing from Lapland, says that it goes to the most retired districts to breed, and spends the summer in marshes and moors towards the mountains, where men are very scarce (Hewitson, vol. ii. p. 385, ed. 3).

PINK-FOOTED GOOSE.

Anser brachyrhynchus.

THIS species is either a very rare bird, or it has not yet been sufficiently distinguished from its congeners; in fact, it was not discovered to be a distinct species till 1833. I have not myself met with it in Sussex.

Mr. Dresser, in 'Birds of Europe,' vol. vi. p. 374, thus speaks of it:—"In its habits, the Pink-footed Goose is said to differ but little from the Grey-lag Goose, which, indeed, it more resembles in plumage than does the Bean Goose. Of its breeding habits, comparatively little is known. It is said to breed in Spitzbergen. Professor Malmgren, who obtained its eggs in the latter island, says that it is extremely shy and wary. In the early summer, it is to be seen in small flocks on moss-covered lowlands near the sea, where there is vegetation here and there, but in the ordinary breeding season it is seen in pairs. When moulting, it frequents freshwater

swamps, and here, when collected in flocks, it is to be met with near the coast. The nest is placed in prominent situations on high rocks, or platforms, or on steep cliffs, often close to a river, or in some grass-covered place. . . . It is extremely watchful."

The Pink-footed Goose is included among the numerous Geese killed out of the flocks of wild fowl shot in the marshes, recorded by Mr. Ellman in February 1850 ('Zoologist,' p. 2773). An adult female of this species was shot at Newhaven, on the 3rd of January, 1891, and was shown me by Mr. Pratt, of Brighton, to whom it was brought for preservation.

Professor Newton, in his paper on the Birds of Spitzbergen ('Ibis' for 1865 p. 514), mentions that the Pink-footed Goose has been met with in Wide Bay, lat. 79° 35' N., and that it probably occurs all along the west coast, where Ludwig found a hatched-out nest, about midnight, in July 1864. Dr. Malmgren seems to have met with at least two nests, in the upper part of Ice Sound, from both of which he shot the female, and another nest was obtained at Mittlehook, in the same Sound.

BERNICLE GOOSE.

Bernicla leucopsis.

THIS Goose has occurred many times on the Sussex coast, at irregular periods, but cannot be considered common, being, in fact, a mere straggler. Of its breeding-place and habits at that season, in its wild state, or of its egg*, little is known; but there appears to be a probability that it breeds in Spitz-

* In confinement it breeds freely, and the egg is only known from specimens laid in that condition.

bergen. It is more common on the west coast of England than in the south or east. Its food is said in Yarrell's B. B. (vol. iv. p. 289) to be grass, and the bents which grow on the sandhills. It is mentioned that Mr. Adams says that his captive birds, which refused worms at other times, would eat them in March, and in winter they were partial to "London Pride" in the garden, cropping it close to the ground. Mr. Knox (O. R. p. 242) mentions that he procured a few specimens in December, 1838, and the following month, in Pagham Harbour, and that it has occurred at Shoreham, and at Rye.

Mr. Dennis wrote me word that one was shot, out of three, in the Clinton Brooks, near Seaford, on February 5th, 1854. Sir Ralph Payne-Gallwey, in the 'Wild Fowler in Ireland' (p. 162), says that "Bernicle seldom, if ever, fly far inland at high water, or to seek food, but usually remain within sight of the tide. They are almost as sea-frequenting a race as the Brent." In the 'Zoologist' (p. 9100), Mr. Dutton mentions that Mr. Vidler shot one at Pevensay. A female was brought to Mr. Pratt for preservation, which was obtained at Shoreham, on the 7th of January, 1891. This bird was alone.

BRENT GOOSE.

Bernicla brenta.

THE Brent Goose, generally known as the Black Goose, is the most abundant of all the race that visit the Sussex coast, flights continually passing by, and in severe weather great numbers come in for shelter on the marshes, but single birds are occasionally met with inland. In my own notes, I have,

however, a few instances. On November 20th, 1842, one was shot on Henfield Level ; and another, on February 19th, 1843, nearly at the same spot. It frequents the estuaries and mud flats, where it feeds on the sea-weed, *Ulva latisperma*, known as the "laver," and on roots of the *Zostera marina*. It is said also to feed on crustaceans. I have, myself, often watched flights of two or three hundred, off Brighton and Shoreham, when the weather was tolerably mild, winging their way along the coast-line, flying almost always to the eastward.

Mr. Booth states that he once found a couple of hundred apparently sleeping on the waves, thoroughly worn out after a heavy gale ; they allowed him to approach within some twenty yards before noticing the boat, even then rising so slowly that the party had time to discharge each of the barrels of four guns, securing six of the birds. This Goose is esteemed one of the best for the table. Its cry is an oft-repeated utterance of the syllables, "honk," or "konk." In 'The Ibis' for 1865 (p. 512), we find that in Parry's expedition a nest and two eggs were brought on board from Ross Islet, lat. 80° 48' N. Dr. Malmgren found it breeding in Treurenberg Bay, and Messrs. Evans and Sturge on the South Cape Islands.

WHOOOPER, ELK, OR WHISTLING SWAN.

Cygnus musicus.

THIS Swan is to be met with in almost every hard winter, occasionally in flocks. It feeds principally on vegetable matters, insects, and mollusks. Its flight is generally low, and though it appears to be performed in a leisurely and

easy manner, it is, in fact, of considerable swiftness. Its note, whence it is named, is a loud "whoop!" frequently repeated.

Mr. Marshall, then of Bolney, shot an immature specimen as it was flying rather low over his head; it was many years back, but I cannot give the date, and it was preserved for him.

In my own notes I find that many flights of Swans were passing over Newhaven and East Blatchington, at the end of December, 1854; and about the same time a small party of five, and two or three larger flocks, were seen flying over Henfield. Mr. Knox (O. R. p. 243) observes, that in January 1839 he saw several flocks at Pagham, and procured many specimens. Mr. Jeffery also states that three Swans were seen in Chichester and Bosham Harbours, in February 1865, and that one was shot out of seven, on January 23rd, 1867, and another near Havant. In February 1879 two were shot at Pagham; in March of the same year several were seen, and one killed, near Chichester; and on December 29th, 1879, an immature specimen was obtained at Bosham.

This Swan swims with its neck much more erect than the Mute Swan, and, as it never dives, always feeds in the shallows; when it has been feeding long in salt water, the neck is often tinged with yellow.

In the 'Zoologist' (p. 7387), one is recorded as having been shot at Poynings Springs, by Mr. Thorncroft, of Brighton, on January 21st, 1861. This is said to have been preserved, and to be in the possession of Mr. Botting of Newhouse. I have the head and neck of a specimen killed at the same spot, but cannot give the date.

I am indebted to Mr. Harting for the following copy of an original letter in his possession, addressed by the Hon. and Rev. W. Herbert to Edward Turner Bennett (names

which will be familiar to readers of White's 'Selborne,' edited by Bennett), and dated 12th December, 1835 :—"A few months ago, that is to say, at the commencement of August 1835, I observed, day after day, a Swan, which was a male of the kind called Wild Swan, or Whooper, standing on the upland turf, which, from long continuance of dry weather, was as brown as a beaten road, by the side of a little paled enclosure adjoining the entrance lodge in *Petworth Park*. Having enquired from the man inhabiting the lodge, who had the superintendence of the water-fowl on the large piece of water in the park, why that Swan was to be seen constantly in a situation so uncongenial to the habits of his race, he informed me that in the spring of 1834 it had had a mate, with a brood of young Swans, in a hovel within the little paled enclosure, where she and the young ones had died; and that ever since, the male Swan had persevered in haunting the spot, and forcing his way there whenever he could find an opportunity, as if in search of them; but that at night he retired to the water in the park. Such an instance of conjugal constancy in a bird deserves to be recorded."

Mr. G. C. Atkinson, of Newcastle, met with a nest of this species during his visit to Iceland. It was placed in the centre of a small island, not more than fifteen or twenty yards in diameter, and just rising above the freshwater lake by which it was surrounded. The nest was made of water-plants, and raised about six inches above the sward on which it was placed; it was about eighteen inches in diameter, lined with materials similar to those used in its outward structure, and contained three eggs in the last stage of incubation. Mr. Proctor says that this species lines its nest with down, with which the eggs are also covered. Mr. Wolley met with the nest in Lapland (see Hewitson, vol. ii. p. 393, ed. 3).

BEWICK'S SWAN.

Cygnus bewicki.

THIS Swan was first distinguished from the Whooper by the late Mr. Yarrell and Mr. Wingate, who observed about the same time that there was a great difference in the form of the *trachea*; and the latter, being a great friend of Thomas Bewick, adopted the name *Bewicki*, which Mr. Yarrell had proposed for it. It is much smaller and somewhat rarer than the Whooper, which, in its general habits, it much resembles, and, like it, only appears on our coast in severe winters.

Mr. Dennis informs me by letter that a Bewick's Swan was shot at Cuckmere Ferry, near Seaford. It had been previously wounded in the wing, close to the body, and came in from the sea, alone; its gizzard contained fine gravel, and a blackish substance of which he could not ascertain the nature. Mr. Pratt informs me that a Bewick's Swan was shot at Shoreham, and sent to him for preservation, in October 1861. Mr. Booth, in his 'Rough Notes,' states that he shot one of this species near Rye, in the winter of 1860; and in January 1871 fired at one close over his head; but, having only a charge of No. 10 shot in his gun, it passed on apparently uninjured. Mr. Jeffery, in his p. n., states that one was shot near Brighton in December 1879, and preserved for the Chichester Museum. The nest was unknown till discovered by Messrs. Seebohm and Harvie-Brown in the Lower Petchora, in 1875 (see 'Ibis,' 1876, pp. 438-441).

MUTE SWAN.

Cygnus olor.

ALTHOUGH the Mute Swan can scarcely be called a truly British bird, yet it has so long been generally diffused throughout the country that it can hardly be right to omit all mention of it, especially as it has been admitted by all writers on British Ornithology. It appears to have been first introduced into Britain from Cyprus, by Richard I., who began his reign in 1189, and, since that period, has gradually spread over Europe, and as it breeds in a wild state in Denmark and South Sweden, there is nothing very remarkable in the supposition that it may occasionally visit England at the time of migration. "When first introduced, Swans were held to be royal property, no subject being allowed to possess any private rights in them, when at large on any creek or river, except by grant from the Crown of a private mark, which, in the time of Edward IV. (1483), was, except the King's sons, only to be granted to persons possessed of a freehold of the yearly value of five marks, and in some cases the Crown allowed the seizure of all White Swans, in certain districts, not having the mark. About the year 1600, a payment of 6s. 8d. was levied on the Bishops of Chichester, then residing at Amberley Castle, on the Arun, on their first coming to the Bishoprick, with regard to their Swans on that river. These Bishop's birds were 'butted on the left wing, and had three notches on the right side of the beake.' The Swans of the Earls of Arundell are butted on the right wing, and their heels both cut off. Sir William Goring had a variety of marks. One of the marks of Walter Barttelott, Esq., was,

‘butted on the left wing, a notch on the right side of the beake near the eye, and a slit on the outer blade of the right foot, and a tongue on the inner blade of the same foot.’ Sir John Shelley, of Michelgrove, and Sir Edward Bishop, had their notches and slits. The Autocrat of the High Stream received the customary 6s. 8*d.* of the latter for a new Swan-mark, and seized Swans to the Earls of Arundell’s use, for non-payment of the fee for the continuance of the mark.” (Antiq. of Arundel, 1766. See Sussex Archæol. Coll. vol. xvii.) The public-house sign of “The Swan with Two Necks” is said to be derived from the two *nicks* used as the Swan-mark of the Vintners’ Company.

The nest of this Swan is a very large structure, of weeds, grass, &c., measuring some four or five feet across, and two or three high, placed near the water, and on the approach of a flood it is generally raised higher, both the birds being assiduously engaged in the work. This Swan is generally rather silent, but when angry it hisses like the Common Goose, and in pairing time utters a few not unmusical notes. It feeds on aquatic plants, mollusks, water-insects, frogs, &c., and in the breeding season is exceedingly pugnacious. The only Swannery in the Kingdom is situated at the western extremity of an estuary called the Fleet, opposite Abbotsbury, in Dorsetshire, the property of the Earl of Ilchester. This is about nine miles long, and from a quarter to half a mile broad. There are records of this Swannery long previous to the Reformation, when it was the property of the neighbouring monastery, at the dissolution of which, Henry VIII. granted it to Giles Strangway, an ancestor of the present owner. In 1880 the number of Swans was over one thousand four hundred; but in the winter of that year the Fleet was frozen throughout, during an exceedingly low spring-tide, when the water-plants growing at the bottom, becoming entangled in the ice, were torn up by their roots at the returning tide, and many of the Swans either migrated or died, reducing

the numbers to about eight hundred, which average is now maintained. See Mr. Mansel-Pleydell's 'Birds of Dorsetshire,' where many further interesting particulars of this Swannery are given.

So much has been written of this bird in poetry and in prose, and so numerous are the myths, both classical and legendary, of which it is the subject, that to refer to them would far exceed the limits of this little work, neither do they apply especially to the county of Sussex.

COMMON SHIELD-DUCK, OR BURROW DUCK.

Tadorna cornuta.

THIS Duck cannot be called abundant on the Sussex coast, but it is occasionally met with in small parties of four, five, or six, at sea, most of which are immature, and it is seldom seen on the shore; though I well remember, when a boy, seeing about such a number on the beach at Shoreham, which I approached within some hundred yards or so; at that distance they looked black and white when they rose, but an old coastguardsman told me they were *Bar Ganders*, and had been about there two or three days. I suspect the syllable "*Bar*" is a contraction of "*Burrow*." Its food consists of small mussels and other bivalves, sea-worms, &c. The young, before they can fly, dive freely, but whether the adult dive or not I have never been able to ascertain.

On the south coast the nearest breeding-place to Sussex is Poole Harbour, in Dorsetshire, whence I have received eggs, taken out of rabbit-holes in the sandhills on the coast,

in which the nests are placed, sometimes near the entrance, at others at a long distance from it. The nest is composed of the dead coarse grass which is usually abundant on these sandhills, and lined with a large quantity of the down of the bird, which in texture and in value is almost equal to that of the Eider Duck, and, when the parent is absent, the eggs are completely buried in it.

Mr. Dennis informed me, but I have forgotten the date, that two out of four Sheld-Ducks were killed in a pool left by the tide, near the mouth of the Cuckmere river, at a single shot, the cartridge passing through a young female and killing an immature male beyond. He said that they flew heavily, with the head low, but, settling among some rocks, ran about in search of shell-fish very actively, and that he had never seen more than four, nor less than two, together, and that he had once seen a pair of young on the Cuckmere in August, though they generally appear in the winter. Mr. Booth, in 'Rough Notes,' states that after a long-continued spell of severe weather in winter, birds of this species are frequently seen in the Channel, off the south coast, in small parties of two or three, or twice that number. Mr. Jeffery, in the 'Zoologist' (p. 1034), states that on November 25th, 1868, he saw two Sheldrakes, there called *Bier Ganders*, in Chichester Harbour; and in the same Journal (p. 2108), Mr. Alwin S. Bell records one shot on the Hastings coast, in February 1870. Mr. Gordon, in his 'History of Harting,' states that the Sheld-Duck has been occasionally seen on the large ponds in that parish. The Sheld-Duck utters a low whistle during its flight.

RUDDY SHELDRAKE.

Tadorna casarca.

ONLY one specimen of this rare visitant has been procured in Sussex, though it has occurred, in other counties, some half-dozen times altogether.

Selby (vol. vii. p. 293, Brit. Orn.) mentions that the first British example was obtained at Bryanston, near Blandford, Dorset, in the severe winter of 1776, and is now in the Newcastle Museum. In Mr. Dresser's 'Birds of Europe' (vol. vi. p. 464) it is stated that the author was informed by a collector of Mr. Möschler, in Southern Russia, as follows:—"The Ruddy Sheldrake breeds here in the hollow trees; and the male perches on a branch of the same tree in which the female is sitting and gives warning in case of danger; and the female leaves her eggs when warned and both birds fly round. Should anyone approach with a dog, the Duck will fly close to the latter, and can then be shot; but if once missed they are careful to keep well out of range." Mr. Dresser also states that Mr. Salvin and Canon Tristram found it breeding in Algeria, in clefts in the cliffs; and that the nest itself consists merely of down plucked from the breast of the bird. In Yarrell (vol. iv. p. 349) the Ruddy Sheldrake is said to make its nest sometimes in the middle of a cornfield, or in a marmot burrow on the plains.

The Sussex specimen to which I have alluded, was shot on September 3rd, 1890, near Harting, and was taken to the vicar, Mr. Gordon, who sent it for preservation to Mr. Pratt, of Brighton, where I saw it. It is a female, undergoing the usual autumnal change of plumage, a few freshly coloured feathers appearing about the neck and breast. Mr. Gordon informed me that it appeared to be in

a perfectly wild state; it had evidently never been pinioned. This species is known also as the Casarca Duck, Kasarka being its Russian name. Latham says that it breeds on the banks of the Volga; and Temminck, that it builds its nest in hollow trees, in the deserted holes of animals on the banks, and in those of the rocks which bound some of the great Russian rivers.

MALLARD, OR WILD DUCK.

Anas boscas.

THE Mallard is resident, and a few breed on the margins of many of the large pieces of water throughout the county, generally among the sedges and other coarse herbage at the “tail” of the ponds, which signifies that part of them into which the stream, the damming up of which forms the ponds, enters. It very frequently places its nest in a wood, far from the water, or by the side of some bushy unfrequented pit. When there are eggs, they are covered with dead leaves or rushes before incubation has commenced; afterwards with a profusion of down. The nest has been occasionally found on the head of a pollard willow or other tree, sometimes at a considerable height from the ground. Large numbers are added to our indigenous birds in October, which remain throughout the winter and depart before the end of March. They do not often assemble in such large flocks as other wild fowl. The Wild Duck, when flying, has its head and neck stretched out in a line with its body. It feeds mostly on vegetable matter, small fish, and frogs; it is very dexterous in snapping up insects on the wing, and is especially fond of acorns. St. John states, in his ‘Sport, &c., in Morayshire,’ p. 8, that it feeds on the

potatoes left in the fields. It seldom dives, except when pursued by a dog or sporting with its fellows, when it frequently rises at a great distance from the spot where it went down. The old Drake, in confinement, often becomes very tyrannical.

GADWALL.

Anas strepera.

THE Gadwall is a rare bird in Sussex and does not generally affect the salt water, but the marshes along the coast, selecting much the same food as the Mallard. It breeds in some of the English counties, but has not yet been known to do so in Sussex. During the day it conceals itself among the reeds, coming forth to feed at night. It does not dive. I have a note that an adult male was shot at Amberley in March 1845. In Yarrell (B. B. vol. iv. p. 373) the nest is described as made of grass, lined with down, placed in a dry spot at some little distance from the water. Mr. Knox says that it has been occasionally shot at Pagham, and at Shoreham. A female was shot by Mr. Burra in Pett Level, and preserved by Mr. Bristow, who thinks it was in November 1881.

SHOVEIER, SPOONBILL DUCK, OR BROADBILL.

Spatula clypeata.

THIS very handsome species visits our coast and marshes in the winter, and is not very uncommon. The nest has not been found in this county, though a few have bred in many others.

I have received the eggs from Hickling Broad, in Norfolk. A pair of these birds, which I have on a pond in my grounds, spend a good deal of their time in swimming round and round, with their heads close together and their bills immersed in the water as far as the feathers of the forehead, thus having their nostrils under water. They raise their heads about every half minute to breathe, and this they continue to do for some quarter of an hour or so. At other times they plough the surface of the water, which they sift through their pectinated bills, retaining the *animalcula* which inhabit it. They are very fond of duck-weed, with which at one time the pond was covered; however, a pair of these birds very quickly cleared it. The only food I give them is maize, on which they seem to flourish. They are very skilful in catching insects on the wing. In its natural state the Shoveler feeds on frogs and small crustacea, as well as on the seeds of various grasses, and is particularly fond of those of *Carex pendula*. The call-note of this Duck has been said to be somewhat like that of the Moorhen, but the only note I have heard from my pair may be represented by the syllables "*konk, konk,*" uttered with much bowing and flexion of the neck.

When shooting at Bolney Mill pond, on November 6th, 1864, a friend shot a female of this species as it flew over his head, in company with two others; four male birds then rose from the further end of the pond and flew over our heads out of gunshot. In December of the same year an immature Shoveler was shot from the same pond, where three or four more of these birds were killed, after the one I mentioned on November 6th. On the 29th of that month I was shown a male and female which had been shot on Ewhurst pond, in the parish of Shermanbury. Mr. Jeffery (p. n.) states that two males were shot at Bosham, in November 1858, and another at Chichester, on December 7th, 1867.

Mr. Booth observes that, during the winters he shot in Pevensey Level, he frequently saw the Shoveler. It breeds in several counties of England and Scotland, forming its nest of grass and down.

PINTAIL DUCK.

Dafila acuta.

THE Pintail comes to our coast regularly in October, and large flocks are often met with at sea, whence they come into the mud flats to feed at night, on mollusks and small crustacea. It is also found in the marshes, especially on those parts which are flooded. It generally prefers the shallow water, where its long neck can reach the vegetation at the bottom.

Though a somewhat silent bird, it occasionally utters a hoarse sort of quack as well as a low guttural grunting note. It does not breed in Britain, but the nest is described as built among grass, in dry places, at some distance from the water, and is rather deep and lined with dead grass. It is the first of the Ducks to enter the decoy, and one of the best for the table. It has been killed at Pagham, and at Chichester Harbour, as well as at Amberley, also in Henfield Level, and at Pulborough, but the greatest number are met with on the sea. I remember seeing fifty or sixty in February 1861, a mile or two off Rye Harbour. Mr. Wolley found the nest near Muonioniska, sunk in the moss in a marshy spot, and lined with down.

TEAL.

Querquedula crecca.

THIS, the smallest of our British Ducks, is in some degree indigenous, a few breeding among the coarse weeds of our larger ponds and marshes. Our native birds receive large additions from the north and east, and they are almost the earliest waterfowl to arrive, a few making their appearance before the end of October, and those which do not remain to breed frequently stay as late as the second week in April. Mr. Booth ('Rough Notes') observes under the date of 1881, April 11th:—"The Teal drakes whistling almost continually when not disturbed, the sound being somewhat similar to that of the call of the cock Bullfinch. The note of the female, who now and then responds, resembles the squeak of a penny trumpet." The Teal feeds chiefly at night, on seeds of various *Carices* and other water-plants, but during the daytime is generally concealed among the coarse herbage. It is essentially a freshwater Duck, though when frozen out it takes to the sea or salt-marshes. It seldom congregates in very large numbers, six or eight being usually found together under the name of a *plump* of Teal. They may be often found in the numerous pits in the woods, and in the less frequented part of the open country, but seem rather to prefer those thickly surrounded with trees, and when disturbed seldom fly to any great distance, dropping into some similar pit to that from whence they had been driven. The nest is very like that of the Mallard.

GARGANEY, OR SUMMER TEAL.

Querquedula circia.

THIS beautiful little Duck is certainly much rarer than the Common Teal. It may be looked upon as an occasional summer visitor. It has not been known to breed in Sussex.

Some fifty years ago I found a nest, with seven eggs, in the driest part of a fen not far from Upware, in Cambridgeshire. It was composed of dry sedge, the eggs being thickly covered with fine down. In Yarrell (B. B. vol. iv. p. 394) it is stated that, in the Broad district of Norfolk, the densest reed-beds are preferred; but Mr. Booth ('Rough Notes') makes this observation respecting the Garganey:—"About Hickling Broad, where I have had ample opportunities of observing them during the summer, I remarked that the eggs were usually laid in the patches of rushes in the unreclaimed marshes, at some little distance from the water, not a single nest having, to the best of my knowledge, ever been detected in a reed-bed. Now and then the birds were known to have bred among the long coarse grass and tufts of rushes on the dryer portions of the hills surrounding the Broad, but as a rule they go further from their usual haunts."

In my own notes I find the following:—"Mr. Ellman informs me that his friend Mr. Vidler shot, on the 11th of March, 1852, four male specimens of the Garganey, near Pevensey; again, on the 21st of March, 1857, three specimens of the Garganey were observed at sea about fifteen miles off Brighton, and one, a male, was shot." The food of the Garganey is said, in Yarrell (B. B. vol. iv. pp. 394-395), to consist of water-plants, grain, insects and their larvæ, small frogs, worms, &c. I can find no proof of

either this species or the Common Teal feeding on acorns, as the name would lead one to suppose. Mr. Knox (O. R. p. 244) thus states :—"Immature examples of the Garganey are not unusual *in the winter* at Pagham, Shoreham, Rye, and Hastings." Now, as the Garganey is a spring and summer visitant, I fancy there is some mistake. In April 1866 ('Zoologist,' p. 266, s. s.), Mr. Jeffery has recorded that a pair of these handsome little Ducks were killed near Selsey, and a male, now in the Chichester Museum, in the same month some years before; and Mr. Monk notes, on p. 2141, that on March 25th, 1870, an immature male Garganey was shot in the marshes near Lewes, in company with six others.

WIGEON.

Mareca penelope.

THE Wigeon, which from its note is also known as the Whew, arrives in considerable numbers about the end of September, which continually increase through the winter. In February the males seem to select their partners; after this, they do not gather together in such large flocks, and by the beginning of March they have mostly departed for the breeding-season. The Wigeon lives on vegetable matter, chiefly, according to Waterton, on the short grass which is the favourite food of the domestic Goose; it also frequently attends the Pochard, when it is pulling up *Zostera marina*, of which the Pochard eats only the root, and the Wigeon the fronds, which are left floating on the surface of the water. In a domestic state the Wigeon does well on maize, and attends the diving Ducks, if several are diving together, and picks up something, for I never could ascertain

what, which floats to the surface from the mud. At night the Wigeon comes in from the sea to the marshes, and freshwater ditches and pools, and the shrill whistle of the wings and the cry of the bird may often be heard throughout the night. The Wigeon generally goes northward to breed, yet that it occasionally breeds in Sussex appears from the following instance. The late Mr. C. Searse Dickins, of Coolhurst, near Horsham, informed me that, in the middle of May 1854, he saw the old and young birds swimming about in Birchin Bridge Pond, and that the nest was about seventy or eighty yards from the water in the old copse, between the Hammer Pond (so named from being one of those which drove the machinery for breaking up the iron-stone in former days) and Hawkins Pond, all three of which are near Coolhurst, and that the nest was very similar to that of the Wild Duck, with perhaps more down. He told me also that they had a brood the summer before, but he did not then know of the nest; his keeper told him that they had bred several times in the forest. Mr. Booth says that when the drake Wigeon begins to whistle, the mandibles are opened wide for several seconds.

Mr. Selby was the first to discover the nest in Scotland, which was on an island in Loch Laighal, well concealed among rushes, and composed of their decayed stems, interwoven with a large quantity of the bird's down. It breeds abundantly in Norway and Lapland.

POCHARD.

Fuligula ferina.

THE most abundant of the diving Ducks, and the best of all for the table, arrives on our coast about the middle of April,

very few remaining to breed. In fact, I know of only one instance of its nest having been found in the county, which I discovered myself, on the side of the lower Mill Pond, at Bolney, close to the water-side. It contained three eggs, but I unfortunately cannot give the date. The bird is very clumsy and awkward on the land, and heavy and sluggish on the wing; on its first rising, flapping for a short distance along the surface of the water. It feeds chiefly on *Zostera marina*, which it obtains in the shallows of the estuaries, eating only the root, though when at sea it also finds various crustacea and small fish. In a semi-domesticated state the Pochard does well on maize. The only note I have heard it utter is a harsh *curr, curr*, except that, when courting the female, the male has a note resembling the syllables "*po-oo-oo*," delivered with the head and neck stretched straight out towards her, almost on the surface of the water. It dives with great ease, but does not use its wings under water. I have never but once seen my birds interfere with fish; in that case one of them gave a pretty hard peck to a considerable-sized tench, which was on the surface of the water.

The nest is merely a hollow in the ground, lined with dead sedge and down. The Pochard is generally known to the wild fowler and the poulterer as the Dun bird, and is so difficult to take in the ordinary decoy pipe, from its cunningly diving back when it perceives that it is entering it, that an especial contrivance has to be adopted for capturing it, as from the great estimation in which it is held for the table, and the large numbers which may be taken at a time, it is one of the most valued of all the Ducks.

Mr. Jeffery remarks (p. n.) that he saw about sixty, mostly adult males, in Aldworth Pond, near Stansted, in January 1867, and that three were shot in Ratham Mill Pond, in January 1879. Since writing the above, I have

heard a female Pochard on my pond utter a hoarse dissyllabic croak, inexpressible in writing, the head at the same time being thrown back till the occiput touched the bird between the wings.

FERRUGINOUS, OR WHITE-EYED DUCK.

Fuligula nyroca.

THIS diminutive species, called also the Castaneous Duck, or Nyroca Pochard, is a very irregular visitant to this country, and can only be called an accidental straggler, appearing occasionally from January to April. It breeds in Poland and in the valley of the Danube, but more abundantly in Turkestan and Cashmere. The nest is described as placed among high rushes, at a short distance from the water, composed of dry aquatic plants and flags, and lined with its own down and a few feathers. It is a very expert diver. Its food consists principally of vegetable matter, insects, and small mollusks.

I have heard of only two examples occurring in Sussex. An adult male was shot in January a few years ago by the late Mr. Dennett, of Woodmancote Place, on a pond near his house, where I have lately seen it, but was unable to ascertain the date more precisely. It was preserved by the late Mr. Swaysland. A second example was shot from a pond near the residence of Miss Simpson, of Fyning House, Harting, by that lady's gamekeeper, Mr. Collins, and presented to Mr. Gordon, vicar of the above parish, who sent it to Mr. Kerr, of Stackstead, Lancashire, by whom it was identified as a young female of the Ferruginous Duck.

The first mention of this species as British seems to have been made by Pennant, who says in 'British Zoology'

(vol. ii. p. 272), published in 1812:—"The description of this species was sent to us by Mr. Bolton"; and after giving this he further states: "This species he informed us was killed in Lincolnshire; we do not find it mentioned by any writer except Linnæus, who took his description from Rudbeck's paintings, and adds that it is found, though rarely, in the Swedish rivers."

Temminck says that it breeds among reeds, on the borders of large rivers and marshy districts. Mr. Green states that he received the eggs from Holland. (See Hewitson, vol. ii. p. 425, ed. 3.)

SCAUP DUCK.

Fuligula marila.

THIS Duck arrives on our shores in October, leaving again early in April. It is exclusively a sea-frequenting species, never coming inland, or into the estuaries, unless wounded, or driven in by stress of weather. It is found in small numbers all along the coast, wherever the water is shallow, but occasionally flocks of several hundred are met with in the Channel, many miles from the land. This Duck feeds on marine vegetable matters and shell-fish, especially mussels, the vast beds of which being called in the northern counties *scaups*, has given rise to the name. The large flocks are generally difficult of access, but when in small parties they are much easier to approach within shot. The Scaup swims very low in the water, showing nothing but the back, head, and neck above the surface, and is a very expert diver. It does not breed in Sussex, but retires into the far north.

In Yarrell (B. B. vol. iv. p. 126) may be found the fol-

lowing:—"The late Mr. Proctor sent the author word that the Scaup Duck is a very common species in Iceland, where it breeds either among the aquatic herbage, or the large stones near the edge of fresh water, making a slight nest, with a quantity of down covering the eggs." As an article of food the Scaup is not worth having, as the flesh is rank and fishy. Mr. Jeffery (p. n.) states that in February 1870 a female was shot near Chichester, and several were seen about that time; and in December 1879 another was killed in Bosham Harbour. He considers it a rare bird on that part of the coast. In 'Zoologist' (p. 9047) Mr. Dutton states that Scaup Ducks were unusually plentiful about Eastbourne, in February 1864.

TUFTED DUCK.

Fuligula cristata.

THIS species is not uncommon on our coast, and in the estuaries from October to March; a few may occasionally be seen on the larger inland ponds. It is an excellent diver, and though it stays under water for a considerable period, and often rises to the surface many yards from where it went down, it does not use its wings under water. Mr. Dickins informed me that there was a brood of Tufted Duck on Birchin Pond in May 1853, and another on the lake at Knepp Castle, in Shipley, near West Grinstead, in 1854; in both these cases the parents were wild birds. It usually goes far more northward to breed, to wit, Rainworth, near Mansfield, Nottingham, whence Mr. Whitaker kindly sent me the eggs. It breeds also in Norfolk and on many of the Scotch lakes, on one of which, at Skene, near Aberdeen, I saw many pairs in August 1887, and from the peculiar manœuvres of one bird, I have no doubt she had a brood on the lake; but owing to the strong ripple on the water I

could not get sight of the young. The note resembles the syllables "*kyrra, kyrra*," pronounced in a very high key. The nest is placed among the rushes and other coarse herbage, generally near the water, being a mere depression in the ground lined with dry sedge, and the eggs are covered with a profusion of down. The bird feeds on the weeds growing in the water, and a pair which I have had for several years in confinement, on a pond in my grounds, where there is no vegetation growing in the water, have continued in excellent health on maize.

I once met with one of these Ducks at table, Mr. Whitaker, of Rainworth, on my visit to him to see their breeding-place, having kindly had one served up for the occasion, and I thought it a very good bird, though some authors do not seem to agree with me.

Mr. Jeffery states that two males and one female were killed on Aldworth Pond, Staunsted, in January 1867, and a few seen near Chichester in February 1870; and mentions that a crippled female was caught in Ratham Mill Pond, in January 1871, and one bird shot on the same pond, in December 1878.

GOLDEN-EYE.

Clangula glaucion.

THE Golden-eye visits our shores in small flocks every winter, being more abundant if the weather is very severe. It is found at sea, as well as on most of the larger pieces of water, inland, in the latter case generally singly. The adult male is much more difficult to obtain than the female, or immature bird, and, from its great power of diving, one which is merely winged or otherwise slightly wounded is exceedingly troublesome to capture, should it fall into the water. Its food consists of small fish, mollusks, and crustaceans. It does not

breed in Sussex, nor I believe in any part of the British Isles. In Norway and Lapland, it places its nest in holes of trees, sometimes as much as eight feet from the ground, and the bird has been seen to carry its young down to the water, holding it under the bill, but supported by the neck of the parent. Boxes are often supplied for it by the natives, which are lined with the soft down of the bird. (See Yarrell, B. B. vol. iv. p. 438.)

I have the following notes :—On January 1st, 1810, a male specimen was shot in Henfield Level; the patch at the insertion of the upper mandible, having but few white feathers, showed it, I suppose, to be not quite mature. On February 6th, 1811, I was standing in a severe snowstorm, at Lancing, with deep snow on the ground, when a Golden-eye suddenly plunged perpendicularly down into a small salt-water pool, like a piece of lead, but, immediately rising again, I shot it, and it proved to be an adult male. On November 6th, 1856, I shot a female Golden-eye on the lower pond at Bolney.

Mr. Booth, in his ‘Rough Notes,’ states that he has known several small parties, and single birds, to remain for some weeks about the muddy harbours and estuaries of the Sussex coast. Mr. Jeffery (p. n.) mentions that two adult females were shot near Chichester, in January 1867; one, immature, on Ratham Mill Pond, in February 1872, and several in January 1887. Mr. Knox says that he has shot this bird at Pagham, and received several specimens killed at Burton and Pulborough, presenting that state of plumage in which it has been called the “Morillon.” Mr. Naylor, in the ‘Field’ of January 19th, 1887, records a male Golden-eye shot on the Crumble pond, Eastbourne, in December 1886; and no doubt many other specimens have been obtained in the county. An adult male was killed some years since, on the lake at Knepp. It is known in Sussex as the “Magpie Diver,” though in some counties this name is given to the Tufted Duck.

LONG-TAILED DUCK.

Harelda glacialis.

THIS is a winter visitant, and is most numerous on our coast during a long continuance of severe weather, and is by no means common, although small flocks are occasionally met with in the Chammel. It feeds on fish, mollusks, crustacea, and freshwater insects. Its note is loud and musical, and may be represented by the word "*calloo*;" during the breeding-season it is very pugnacious, often fighting with its companions. It does not breed in Britain. The nests were found by Messrs. Shepherd and Upcher, on a small island in Lake Myvatn in Iceland, and were placed among low bushes by the edge of fresh water, and composed of grass, with a thick lining of down (see Yarrell, B. B. vol. iv. p. 449).

In my own notes I find a female Long-tailed Duck was obtained near Hailsham, in the winter of 1849-50. Mr. Knox (B. B. p. 246) says:—"I shot a young male at Pagham Harbour, out of a flock of Scaup Ducks (1839). Immature specimens have occurred on other parts of the coast, near Chichester, Brighton, and Pevensy, and I have a specimen which was shot as far inland as Amberley, in the hard winter of 1844-5."

Mr. Booth, in 'Rough Notes,' writes of these Ducks that it is "only when the weather is severe that they favour the flat sandy shores to the west of Brighton, in Sussex, with a visit. In December 1879 and again in 1880 I remarked them in greater numbers than usual. . . . Small parties of from six to eight up to double that number are not unfrequently seen in this part. On a fine still morning, in the last week of December 1883, when the sea was as smooth as glass, I noticed about a dozen, in company with as many Eiders, and some

hundreds of Common and Velvet Scoters; so watchful, however, were the whole community, that it was impossible to approach within range." A correspondent of the 'Field,' February 5th, 1887, states that he had seen a male Long-tailed Duck, which had been shot at Rye. Mr. Jeffery (p. n.) records that a male and female were shot at Sidlesham, in November 1860, and an immature specimen at the same place, November 1868. In the 'Zoologist,' Mr. Dutton mentions that a fine female was killed by a farmer, with a stone, while swimming in a small pond near Polegate, in January 1864 (p. 9046); and at p. 2059, s.s., Mr. Jeffery records an immature specimen, taken near Chichester, November 25th, 1870, and another from Sidlesham, December 1878.

EIDER DUCK.

Somateria mollissima.

THIS species is met with in small numbers, and is rarely found at any great distance from the sea. It is a regular autumn and winter visitor to the Channel, off our coast, generally in small flocks, feeding on the shallows, in company with other species of diving Ducks, on small mussels and other bivalves, crabs, and shrimps. According to Mr. Booth, it also swallows sea-weed, grit, and small stones, to assist digestion. Selby ('British Ornithology,' vol. ii. p. 339), speaking of the nest in the Farne Islands, states that it is composed of dried grasses, mixed with a quantity of the smaller algae, and, as incubation proceeds, a lining of down plucked by the bird from her own body is added. In Yarrell (B.B. vol. iv. p. 459) it is stated that, although the nest is usually at no great distance from the water, it has occasionally been found a mile or two inland, and also at a considerable elevation.

Colonel Feilden states that he has taken one in the Shetlands, placed in the midst of knee-deep heather, at least 500 feet above sea-level. Mr. Knox (O. R. p. 245) says that an immature bird was shot on November 1830, at Chichester Harbour, and two, some years before, at Rye Marsh, associated with a flock of Brent Geese. Mr. Jeffery, in p. n., says that a female was shot at Selsey, December 1858, and another in December 1872, at Bosham; also a young male, at the same place, in December 1880. Mr. Booth, in 'Rough Notes,' states that one or two immature females were shot off Rottingdean, in October 1882; that he secured two drakes, out of eight immature birds, which were diving off a stony bank a short distance from the beach near Lancing; and that he had frequently recognized Eiders off the coast of Sussex. He refers to a flock of seven, which he saw on December 29th, 1883, somewhere off that coast.

In the 'Zoologist' for 1881 (p. 63) Mr. Herbert Langton, of Brighton, states that an immature Eider was seen to settle on some rocks, off Rottingdean, January 3rd of that year, and after remaining all night, Mr. Guthrie, of that place, after a long chase, succeeded in obtaining it; it had been previously wounded.

COMMON SCOTER.

Edemia nigra.

This Scoter is an abundant visitor to the Channel every winter, and is exclusively marine in its habits, assembling in flights of some hundreds, on the sandy or rocky shallows, where they obtain, by diving, the bivalves, crustacea, and small fish on which they subsist. Flocks of various numbers may be constantly seen fishing off Shoreham and Lancing, generally

about a mile from the shore, but individuals often fly in to the very edge of the breakers, whence, however, they soon return to the main body. This bird never enters the harbours or estuaries, except in the very heaviest weather, or when it has been crippled.

The Scoter is most commonly known as the "Black Duck," but is occasionally called the Coot. It breeds in high Northern latitudes, and according to Yarrell (B. B. vol. iv. p. 274) the nest is generally placed on an island, in a freshwater lake, or in the bogs in the vicinity, and is composed of grass and moss, with a lining of down. I have noted that on February 7th, 1841, a specimen of this Duck was shot by the late Mr. Scutt, on a piece of water near the Lewes Paper Mills, known as the Pell, an adult male, the gizzard containing a single specimen of *Cardium*. Mr. Knox observes that the Scoter may be found in the Channel at all times of the year. The flesh of this species is extremely unpalatable, strongly resembling a mixture of bad fish and rancid train-oil, and it is perhaps for the sake of the additional mortification that the Roman Catholics are permitted to enjoy it on fast-days*. The French have a proverb, "Il ressemble à une macreuse (scoter), il n'est ni chair ni poisson," applied to an unreliable person. The only note I have heard from this bird resembles somewhat the syllables "t", "tē" hoarsely repeated several times.

* On this subject there is an amusing treatise by M. Graindorge, published at Caen in 1680 and reprinted at Paris in 1780. See also 'Correspondence of John Ray,' published by the Ray Society in 1848 (pp. 131, 134, 135, 147, 148).

VELVET SCOTER.

Edemia fusca.

THE visits of this Duck to our coasts occur at the same time as those of the Common Scoter, and, though less abundant and more local, the habits of the two species seem to me identical, except that the Velvet is much the wilder of the two, and appears in smaller flocks. According to Yarrell (B. B. vol. iv. p. 479), it frequents, and breeds on, the large lakes in the mountainous districts of Scandinavia, especially those of which the shores are flat and boggy, and covered with vegetation; and the nest is placed in a dry spot at a considerable distance from the water, in a mere depression of the ground, under some bush or tree, and lined with leaves and down. I take the following from my own notes:—

On February 23rd, 1841, I saw, at a Brighton bird-stuffer's since dead, an adult male specimen, which had been shot near Alfriston, several miles inland, and which passed into my collection. At the end of February 1851, a male was picked up dead, on the beach, at Rottingdean, and preserved by Mr. Pratt, from whom I received the trachea. On February 20th, 1861, I shot, about a mile off Rye Harbour, four males and one female, of this species, of which there were several flocks, which we found impossible to approach in a sailing boat, but by rowing, which was very hard work in the rather heavy sea which was running at the time, I obtained a few shots. The first was the only bad shot I ever made with which I was greatly pleased, for I missed the leading bird at which I aimed, and killed the two behind it, at which I did not shoot, a male and female; as I wanted specimens this suited me well, as I had only a shoulder-gun. On

March 4th I was again at about the same place, and saw flocks consisting of from three to thirteen, and obtained one more male, though they would rarely allow the boat to approach nearer them than about three hundred yards, and a few Black Ducks, of which I saw many hundreds. The boatmen told me they were generally there, and a little further to the east, till late in June. The gizzards of both the Common and the Velvet Scoters contained large full-grown specimens of *Cardium edule*, and a few specimens of a small *Arca*. I was there again soon after, in a perfectly calm sea, and could not get near either species, though I saw many of both. Mr. Knox states that he had a specimen, without date, which was killed off Selsey Bill. Mr. Jeffery (p. n.) observes that one was obtained at Selsey, and went to Chichester Museum, but I have not the date.

In the 'Zoologist' (p. 9101) Mr. Dutton records that one was taken alive, near Eastbourne, on April 14th, 1860; and again (p. 9578) that he purchased a female, shot off that town, November 2nd, 1865.

GOOSANDER.

Mergus merganser.

THIS, the largest of the British Mergansers, is by no means a common species, and seldom visits us, except in the hardest winters, when it may be occasionally met with, both on fresh water and on the sea. Fish and crustacea seem to be its only food. It breeds in hollows in trees. And Mr. Booth states in 'Rough Notes,' that he has frequently obtained the young in the down, in the Northern Highlands of Scotland. The Goosander is known to the coast shooters as the "Spear Duck;" its note is a loud whistle. Mr. Gordon, in his

‘History of Harting,’ includes it in the list of birds occurring in that parish in severe winters. Mr. Booth states that twenty-five years ago, at Pagham, and more lately at Rye and Shoreham, he has met with this species. They are now less plentiful about the Sussex harbours than on the East coast. Mr. Denuis informed me that a fine male Goosander was brought to him, killed near Seaford, in January 1850; another (sex not mentioned), on the 17th of the same month; and a third, shot in very severe weather, in December 1856. Mr. Jeffery (p. n.) states that a male Goosander was shot at Birdham, in January 1868, which passed into the Chichester Museum. One is mentioned, as procured near St. Leonards-on-Sea, in February 1880, in the ‘Field’ newspaper. Mr. Anthony Ralph Biddulph, of Burton Park, has been good enough to inform me that he killed two specimens of the Goosander on the lake there at one shot, but that he never heard of the *Hooded Merganser* there, so that the report alluded to by the Editor of Yarrell’s B.B. (vol. iv. p. 510) was a mistake.

RED-BREASTED MERGANSER.

Mergus serrator.

ALTHOUGH this species is not very common, it is more frequently met with than the last, especially females and immature birds, and is not so much addicted to fresh water, though, as far as the tide runs up our rivers, it may occasionally be found in them. Like the Goosander, it feeds exclusively on fish, of which, when wounded, it will sometimes disgorge a large number. It does not place its nest in hollows of trees, but on the ground, generally among heather, or under the shelter of thick bushes; in the South of England

it does not breed, but the nest has often been found in Scotland. When the bird has been long in salt water, the breast becomes of a rich salmon colour. I have a female in my own collection, shot at Shoreham in February 1842. Mr. Jeffery (p. n.) mentions a male, killed at Selsey, December 1864, and that he saw another male, killed in the neighbourhood, at Mr. Beatson's shop in Chichester, in the same month; that in January 1867 they were numerous, and many were killed in Chichester and Bosham Harbours, and that he found an eel nearly a foot long, and a small crab, in one from Bosham. In 1871, Mr. Jeffery saw four in Bosham Harbour, also a few on the 18th of January, 1873, and one in the same year as late as August 1st. In the 'Zoologist' (p. 6606), Mr. Wilson records a male, shot near Worthing, in the spring of 1853.

SMEW.

Mergus albellus.

THE Smew may be found in this county in considerable numbers, in most severe winters, the females, known as "Redheads," being the most common. Like the rest of the Mergi, it gets its living entirely by diving, at which it, like them, is a great adept, fish being its only food.

Mr. Wolley, while in Lapland, was the first to find out its breeding habits, of which a most interesting account may be found in 'The Ibis' for 1859 (pp. 69 to 76). The nest was built in a hole of an old birch tree, which had been lined with feathers. Mr. Wolley states that the Smew had a habit of turing out the nest of the Golden-eye, and taking possession, and that the eggs of the Smew being smaller, and thus less saleable, the Smew, when caught in the hole, was killed by the natives. I have an adult male in my own collection,

which was found dead, but in excellent condition, buried in a snow-drift, by which, as no shot-marks were found on the skin, it had apparently been overwhelmed while asleep, on the bank of a ditch in the level near Alfriston. In my own notes I find the following :—On February 19th, 1844, I saw, at a bird-stuffer's at Brighton, two adult male specimens of the Smew, which had been shot at Amberley, during the last week of the previous month. Mr. Parker has noted that a bird of this species was shot by Mr. Dunn, at Paul Grove, near Bexhill, which is now in his possession. Mr. Jeffery (p. n.) tells us that a young male was shot at Chichester Harbour in January 1861; an adult male, near Mundham, in January 1870; a female, at Bosham Mill Pond, September 1875; another at Ratham, December 10th, 1875; and a fifth, a female, at Bosham, March 8th, 1888. In the 'Zoologist' (p. 4762) it is stated that in May 1855 Mr. Grantham obtained a female, between Cuckmere Haven and Seaford. In p. 9016, Mr. Dutton records an adult male shot at Cuckmere Haven, in February 1864; at p. 9101, an immature specimen shot near Eastbourne; and at p. 9578 he says that Mr. Bates, of Eastbourne, received an immature specimen, February 1865.

APPENDIX.



THE following extracts are from unpublished manuscripts of W. Markwick, Esq., of Catsfield, near Battle, of the existence of which I was fortunate enough to be made aware while this book was in the press. The ornithological portion of them consists of three folio volumes, containing coloured drawings and descriptions of 136 British Birds. There are also, in these same volumes, notices and figures of a few Quadrupeds, Reptiles, and Crustacea, and descriptions of Fish, without figures; two or three folio volumes containing drawings and descriptions of Wild Plants, far better executed than those of the Birds, all relating to Sussex, and dating from 1793 to 1805, written partly at Catsfield and partly at Denne Park; one manuscript volume of *Mr. Linnæus*' 'Birds of Sweden,' and several of Natural History extracts from the works of numerous travellers. All these are in the possession of Mrs. Eversfield, of Denne Park, near Horsham, who most courteously gave me permission to make such extracts as I should think suitable. It may not be generally known that Mr. Markwick married Miss Eversfield, of Denne Park, of which he eventually became the owner, and took the name of Eversfield.

The following description of the Dark-Brown Hawk, or Buzzard, differs somewhat from the coloured figure, which more resembles the Honey Buzzard than any other of the genus; but this species does not worry Rooks, and is not in this country in the winter, neither do the given dimensions agree with those of the Honey or any other

Buzzard. It is impossible, even with the assistance of the figure, to decide with certainty what bird Mr. Markwick intended to represent. I, however, give the description, and leave it, *quantum valeat* :—

“*A Dark-Brown Hawk, or Buzzard, Falco.*—When I arrived at Dean Park, near Horsham, in May 1793, I found in the Garden two Birds of the Falcon Genus. One was the Common Buzzard before described, and the other was a Hawk or Buzzard of a very dark brown Colour, which was caught alive in the Park by the Gardiner, during the preceding Winter. He observed two of them to resort together in Pursuit of the Rooks, and caught one of them with a Snare. I ordered this Bird to be put into a Cage, and made the Drawing from the living Bird. It was somewhat less, and more slender, than the Common Buzzard, and its Measurements were nearly as follow : Its Length from the Tip of the Bill to the end of the Tail, about 18 inches, and its Breadth from Tip to Tip of the Wing when extended, about four feet. Its Bill was hooked, of a dark blue, with a blackish Tip, and the Cere was of a Lemon Colour, as were the Edges of the Mouth, which was beset with several black Hairs, or Bristles. The Eyes were large and beautiful, the Irides of a hazel Colour, the Head, hinder Part of the Neck, Back, Wings, and Tail, were of a dark-brown chestnut Colour, darkest on the Quills and Tail, which last was barred with dusky ; the Chin and Throat were whitish, streaked with dark brown ; the Breast and Belly were also irregularly variegated with white and dark brown. The Thighs were brown, and the Vent variegated or barred with dark brown and white. The Legs and Feet were of a pale yellow, and the Claws hooked, sharp pointed, and of a black Colour. If this is not a Variety of the Moor Buzzard, *F. Æruginosus*, I know not of what Species it is, and it is probably new as a British Bird.”

Of the *Kite*, of which Mr. Markwick gives a description and figure, though he does not say where it was killed, he

makes the following remarks :—"Montague says, 'This Bird, from its great Length of Wings and Tail, is capable of supporting itself in the Air, with very little Motion, and for a great Continuance, but is slow in Flight.' This is true in general, but it can occasionally exert itself with great Quickness. I once saw two Kites soaring in the Air with an easy Motion, at no great Distance from a Reedy Marsh, when one of them by Accident, or by Design, dropped Something from its Claws, which appeared to me, as it fell towards the Ground, to be either a small Eel or a Snake ; when instantly the other Kite darted after it with amazing Velocity, and caught it in its Claws with surprizing Dexterity before it reached the Ground."

Mr. Markwick gives a figure and description of the *Hobby*, and says, "That it breeds here I know, having seen a Young one of this Species in the Garden at Denn Park, which was taken in the Neighbourhood of Horsham."

Of the *Roller*, which he mentions in his Catalogue in the Trans. of the Linn. Soc. vol. iv., he gives a figure and adds the following :—"The Bird from which I drew this Figure was shot and caught alive near Crowhurst Church, in this Neighbourhood, on the 22nd of September, 1790. It lived several Days, but was dead, flayed, and badly stuffed, when I saw it on the 2nd of October after."

Speaking of the *Landrail*, of which he gives a figure, he remarks :—"Though Mr. Latham says few Places in England are destitute of this Bird in Summer, I am inclined to think it does not breed here in Sussex, as I never heard of any Nest or Young Ones being seen, nor did I ever see the Bird itself earlier than the 24th of August. That it is a Bird of Passage there is no Doubt, appearing with us about the latter end of August, and disappearing about the Beginning of November, for the latest I ever heard of was one being shot on or about the 6th of November."

In the same MS. he says of the *Great Snipe* :—"This Bird was killed in the Neighbourhood of Horsham, and

given to me by a Friend, on the 1st of October, 1793." Here follows the description. He then states, "There can be little Doubt of this being the *Scelopax Major* of Latham, tho' my Specimen is inferior in Size and Weight to the Bird described by him, and seems to differ also somewhat in the Colour of its Plumage; perhaps this Species is subject to Variety."

He observes of the *Flycatcher*:—"It is the latest of all the Summer Birds of Passage, as I have known but one Instance, in Three and Twenty Years, of its Appearance before May, and that only two Days sooner, viz., 29th of April; perhaps because its Principal Food, Flies, do not abound till that Time. However, it can feed on Fruit, and is reckoned very mischievous in Gardens, on account of its eating Cherries."—Now that this is quite a mistake I have no doubt. I suppose whoever gave Mr. Markwick his information had mistaken the Garden Warbler, which is very fond of cherries, for the Spotted Flycatcher.—WM. BORRER.

Of the *Siskin*, Mr. Markwick observes that "It is a Bird of Passage. Mr. Latham says it is not unfrequent in England in the Winter Season, but I have never seen it here at that Time; the earliest of my observing it was on the 5th of April, 1768, and, in the Year 1780, I first saw it on the 10th of April, and it continued with us till the 30th of the same Month. I have seen it hanging back downwards, like a Titmouse, as Mr. Latham describes it, picking the Seeds out from the Cones of Fir Trees, which at that time began to open from the Heat of the Sun. Its Stay with us is not above a Fortnight or three Weeks at the Farthest."

Of the *Lesser Redpoll* he says:—"This Bird, which I received from a Friend, was killed on the 27th of November, 1797; it is very rare in this Neighbourhood, being the only Specimen I ever saw."

Of the *Waxwing*, Mr. Markwick says:—"The Bird from which I drew the figure was killed in this Neighbourhood about the middle of February, 1801." Here follows a

description of this specimen. He also mentions having examined two more of these Birds, and remarks on the difference in the number of the waxlike appendages on the wings. With regard to the *Golden Oriole*, of which he gives a figure of a male, he remarks:—"This Bird, which is very rare in England, though not so in France and other parts of Europe, was killed in the Neighbourhood and sent to me on the 4th of May, 1807."

"*The Swallow Tribe*.—The earliest Visitor of this Tribe in these Parts is the common House Swallow, *Hirundo rustica*, which makes its first Appearance generally in April. I never saw it sooner than the 7th of that Month, nor have I observed it later in the Year than the 16th of November, and then but few of them, for they, in general, disappear at least a Month sooner.

"The next is the House Martin, *Hirundo urbica*, which appears usually in April. I never saw it earlier than the 14th of that Month, but I once saw it so late as the 8th of December, though the generality of them had disappeared long before that Time.

"The Sand Martin, *Hirundo riparia*, usually appears in May. Having a Sand Bank in the Neighbourhood, where some of these Birds breed, I have been able to ascertain with some Degree of Certainty the Appearance of these Birds for the last three Years. In 1789, on the 28th of April, none were to be seen; but on the 6th of May I saw several. In 1790, on the 8th of May, none were to be seen; but on the 11th I saw several. Also in 1791, on the 5th and 7th of May, none were to be seen, the Weather being cold. On the 8th it grew warmer; and on the 10th I saw several. In the first of these Years I saw one of these Birds about the End of September for the last Time. In the next Year I visited the Sand Bank on the 6th of September, but no Birds were to be seen. In 1791 I went from home in August, and when I returned on the 23rd of September, none of these Birds were to be seen near the Sand Pit.

“The Swift, *Hirundo apus*, is the latest in its Visit, usually appearing first in May, and not continuing with us nearly so long as its Congeners; the latest that I ever saw it was the 11th of August.

“How this Tribe of Birds dispose of themselves in Winter? is a Question that has employed the Pens of the most able Naturalists, some of whom assert that they migrate from one Country to another, and others that they dispose of themselves in Holes and Caverns, and even under Water, remaining in a torpid State till the Return of Spring, and then survive and resort to their old Haunts: both of which opinions have been so ably supported by Authors of the first Credit, that it is scarcely possible to refuse one’s Assent to each of them; and indeed (tho’ it may be thought presumptuous in me to hazard a Conjecture after such great Authorities) I am inclined to think that what that very able Naturalist Mr. Pennant asserts is the real Fact, that the greatest Part of this Tribe do migrate, but that some of them, perhaps the late Broods and weak Birds, have a Power of laying themselves up during Winter in Holes and Caverns, in a torpid State, and of reviving again in the Spring at the same Time with the Flies and other Insects; for why should not the Bird be capable of doing this as well as the Insect on which it feeds? Of their Migration I think I have often observed what amounted to almost a Proof of it, viz., their assembling together in great Numbers (I mean only Swallows and Martins, *H. rustica* and *urbica*) on the Tops of Buildings, in the Month of September, and sometimes great Flights of them are seen very high in the Air; indeed from the Testimony of Sir Charles Wager and Capt. Wright there can be no Doubt of it: and some Circumstances have induced me to give Credit to the Opinion of (at least some of them) passing the Winter in a Torpid State. So late as November, long after the Majority of them have disappeared, I have frequently observed, on a warmer Day than usual, one or two Swallows or Martins flying backwards and

forwards under a warm Hedge or on the sunny side of some old Building; nay, once on the 8th of December, I saw two Martins, flying about very briskly, the Weather being mild. From whence could these Birds come if not from some Hole or Cavern where they had laid themselves up for the Winter? Surely it will not be asserted that these Birds migrated from the Coast of Africa, or any other distant Country, at that Season of the Year merely on the coming of two or three fine Days? Again, in the Spring a few Swallows or Martins will frequently make their Appearance on a warm Day so early as April, but they do not appear in any Number till later in the Summer, and tho' this does not absolutely prove their lying in a torpid State, yet it favours that Opinion."

Thus far Mr. Markwick.

I was not aware, till after this work was in the press, that Mr. T. J. Monk, of Lewes, had, in the 'Field' Newspaper of January the 25th, 1871, while endeavouring to induce the Sportsmen of East Sussex to establish a close time for *Woodcock*, from the 1st February, given a list of parishes in that division of the county in which he had known them to breed, namely, Ardingly, Ashburnham, Balcombe, Battle, Brightling, Catsfield, Chailey, Crawley, Dallington, East Grinstead, East Hoathly, Fletching, Frant, Hartfield, Maresfield, Mayfield, Newick, Rotherfield, Slaugham, Tunbridge Wells, Waldron, and Worth. There are other interesting points in Mr. Monk's paper, but I abstain from further extracts, as I hear that we shall shortly have further information on the subject from Mr. Monk himself.

In the History and Antiquities of Horsham, by Miss Dorothea E. Hurst, p. 232, may be found this note:—"The very rare circumstance of a *Redwing's* nest being found in this country occurred at Warnham, near Horsham, in April 1872. It was discovered by Mr. D. M. G. Price, in a low

bush overhanging a stream, at the end of Warnham Mill Pond. The bird (well known to him) was on the nest, and flew off when he approached it. The nest had five eggs in it. One of them was shewn to the Naturalist, Mr. Hall, who unhesitatingly pronounced it to be that of the Redwing." As Mr. Hall is now in America, I have had no opportunity of obtaining further information on the subject.

A *Great Bustard* was shot on Pett Level on the 6th of January, 1891, by Charles Cooke, and sold by him to Mr. E. Vidler, of Havelock Road, Hastings. It was a female, and in good condition, and weighed 7 lbs. 10 oz., the crop containing dry grass. It is somewhat remarkable that of seven *Great Bustards* obtained in various counties between the 9th of December, 1890, and the 5th of February, 1891, all should have been females. See 'Zoologist,' 1891, pp. 104-105.

The extremely severe frost of the winter of 1890-91, which, with a very slight break or two, lasted from the beginning of December to the middle of January, though it brought an unusually large number of *Ducks* and *Geese*, as well as of the three species of *Swan*, all along the coast, was not productive of many really rare species. Those principally worthy of notice among this class were a specimen of the *Pink-footed Goose*, mentioned in the foregoing pages, a considerable number of *Smews*, a few *Shell-Ducks*, and a remarkable fine male *Goosander*, which was shot on the Western Rother in West Harting, and recorded by the Rev. H. D. Gordon in the 'Zoologist,' p. 117, 1891. An unusually large number of the *Common Bittern* also occurred in various parts of the county, one of which was shot as it rose from a bed of cabbages in the western part of the town of Brighton. A fully mature specimen of the *Little Gull* was shot at Shoreham. Several *Shore Larks* were obtained on the coast near Brighton, of which five or six were taken to Messrs. Pratt, who also received five *Lapland Buntings* and a large number of *Snow Buntings* and *Bramblings*.

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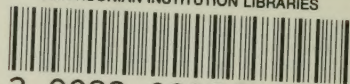
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